

Iowa Rural Health Telecommunications Program Proposal for:

FCC Rural Health Care Pilot Program Order WC Docket 02-60

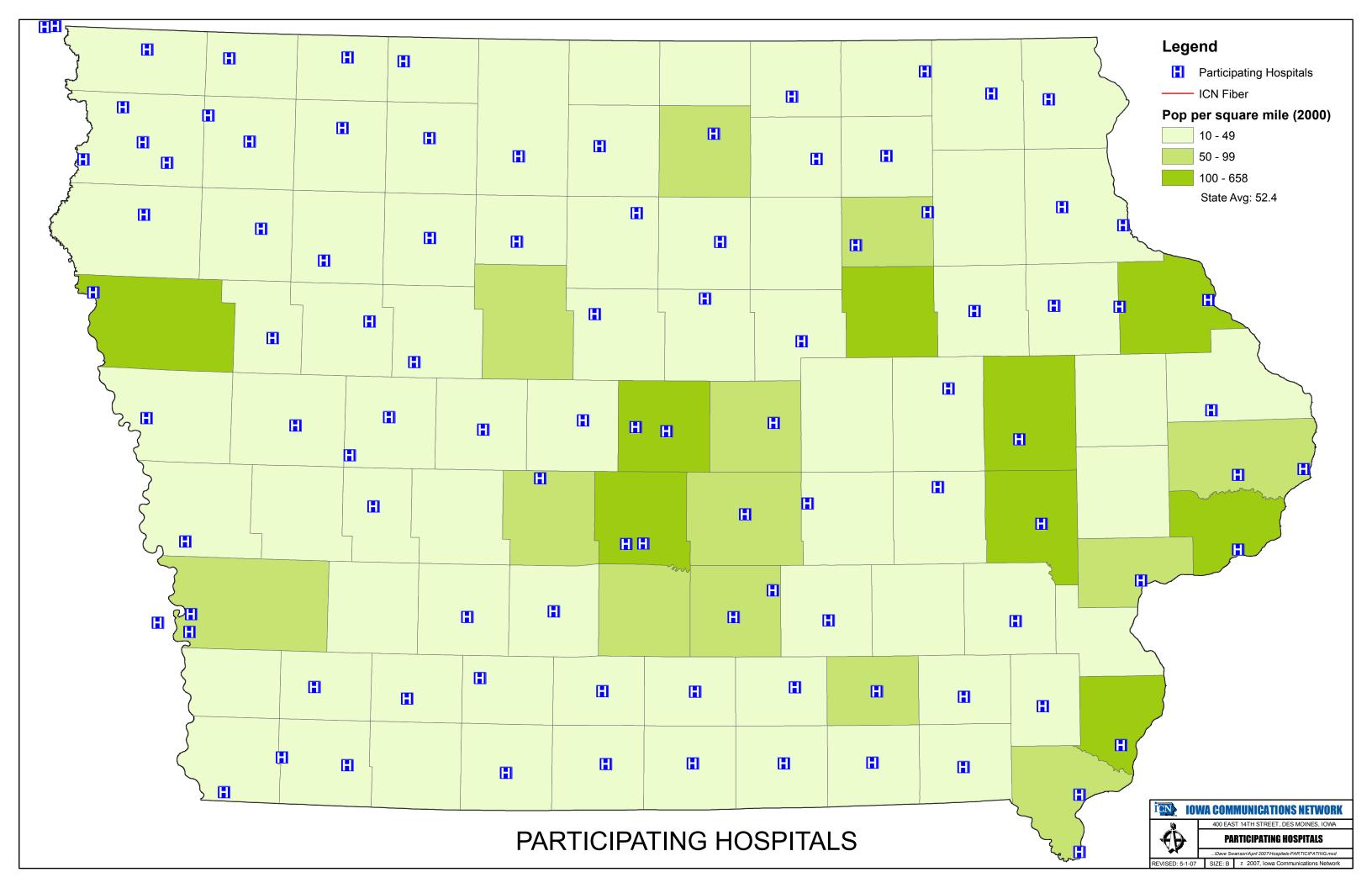
To: Commission's Secretary, Office of the Secretary, Federal Communications Commission (FCC)

Submitted by:



May 4, 2007







### Program / Subject

The Iowa Rural Health Telecommunications Program and following application are in response to the Federal Communications Commission Rural Health Care Pilot Program Order WC Docket 02-60.

**Date:** May 4, 2007

From: Iowa Rural Health Telecommunications Program and Iowa Hospital Association

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#### **Priority Area Summary**

The Iowa Rural Health Telecommunications Program is requesting funding from the Federal Communications Commission's Rural Health Care Pilot Program to connect a consortium of one hundred (100) rural and urban hospitals to the Iowa Communications Network, a statewide fiber backbone providing dedicated and secure network services.



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## **EXECUTIVE SUMMARY**

#### **Problem**

According to the Department of Health and Human Services, rural hospitals face unique challenges beyond their urban counterparts such as geographic isolation, travel issues, and fewer resources (ULP, 2007). Iowa's agricultural and farming heritage provide the basis for boasting as the nation's largest producer of eggs, pork, corn, soybeans, and ethanol (Economic, 2007). However, Iowa has the opportunity to improve the delivery of efficient, quality healthcare, specifically for smaller Iowa communities which are hampered by limited financial capital, an eighty-nine percent (89%) rural geography, and year round inclement weather with tornados, ice, snow, and flooding.

#### **Proposed Solution**

One goal
100 hospitals
1,000 megabits each
Enhanced healthcare for Iowans

The Iowa Rural Health Telecommunications Program (IRHTP) is a consortium of public and private hospitals and state government departments solving the problem of isolation, travel, and limited resources that constrain health care delivery in rural Iowa and its surrounding region.

The strength of our proposal lies in the common goal of one hundred (100) hospital partners, connecting to each other and the world with true 1,000 megabits (1 gigabit) of high speed bandwidth, to enable quality health care anywhere in the region. Never before have 100 hospitals agreed to connect to each other in this region. Never before have circuits of such speeds been available in remote areas of Iowa.

To achieve this goal, IRHTP will leverage the expertise of the Iowa Hospital Association (IHA) as a health care collaborator, the capability of the Iowa Communications Network (ICN) in administering telecommunications services, and the generosity of the Federal Communications Commission (FCC) in providing seed money. The goal is to use proven technology to connect one hundred (100) mostly rural hospitals, with 1,000 megabits of high speed Ethernet access, to a secure, dedicated, and financially sound network.

#### **Parties Involved and Roles**

- 100 hospitals: Utilizes network access for telehealth services to improve health care in their communities. Each hospital will receive 1,000 megabit access through a buried fiber optic network, and will bear fifteen percent (15%) of individual cost.
- *Iowa Hospital Association (IHA)*: Leads the hospital collaboration and administers the proposal and procurement processes.
- *Iowa Communications Network (ICN) a State of Iowa owned common carrier:* Maintains and administers the new infrastructure once installed.



• Federal Communications Commission (FCC): Provides eighty-five percent (85%) funding as seed money. Without seed money, this proposal cannot germinate.

#### **Benefit and Cost Summary**

The proposed healthcare network benefits Iowa patients, families and communities. The network will:

- Facilitate timely diagnosis and initiation of appropriate treatment or transfer of patients in rural Iowa communities.
- Facilitate rapid access to and transmission of diagnostic images and patient information between hospitals.
- Extend and improve terrorism and disaster preparedness and response through communication network interoperability between hospitals, Iowa Department of Public Health, and Iowa Homeland Security and Emergency Management.
- Provide the telecommunications foundation for a statewide deployment of electronic medical health, improving quality and patient safety.
- Support the viability of Iowa's rural hospitals, and the contribution those hospitals make to the economy of their rural communities.
- Enable future remote monitoring and care coordination for intensive care patients.

The result is high quality, secure health care access to 3 million Iowa residents, anywhere in the region, in any weather.

The proposed healthcare network expansion will cost approximately \$11.7 million. Of this, the consortium is requesting \$9.95 million, or 85 percent, be funded through the FCC. The remaining \$1.76 million, or 15 percent, is to be borne by the individual hospitals and through collaborative cost sharing. Costs include:

- \$7,704,050: last mile buried fiber connection for each hospital
- \$1,779,072: access electronics providing one (1) gigabit of bandwidth to each hospital
- \$2,221,510: core electronics for a dedicated, resilient ten (10) gigabit backbone.
- \$11,704,632: Total Cost

#### **Proposal Features**

Five (5) areas distinguish the IRHTP proposal:

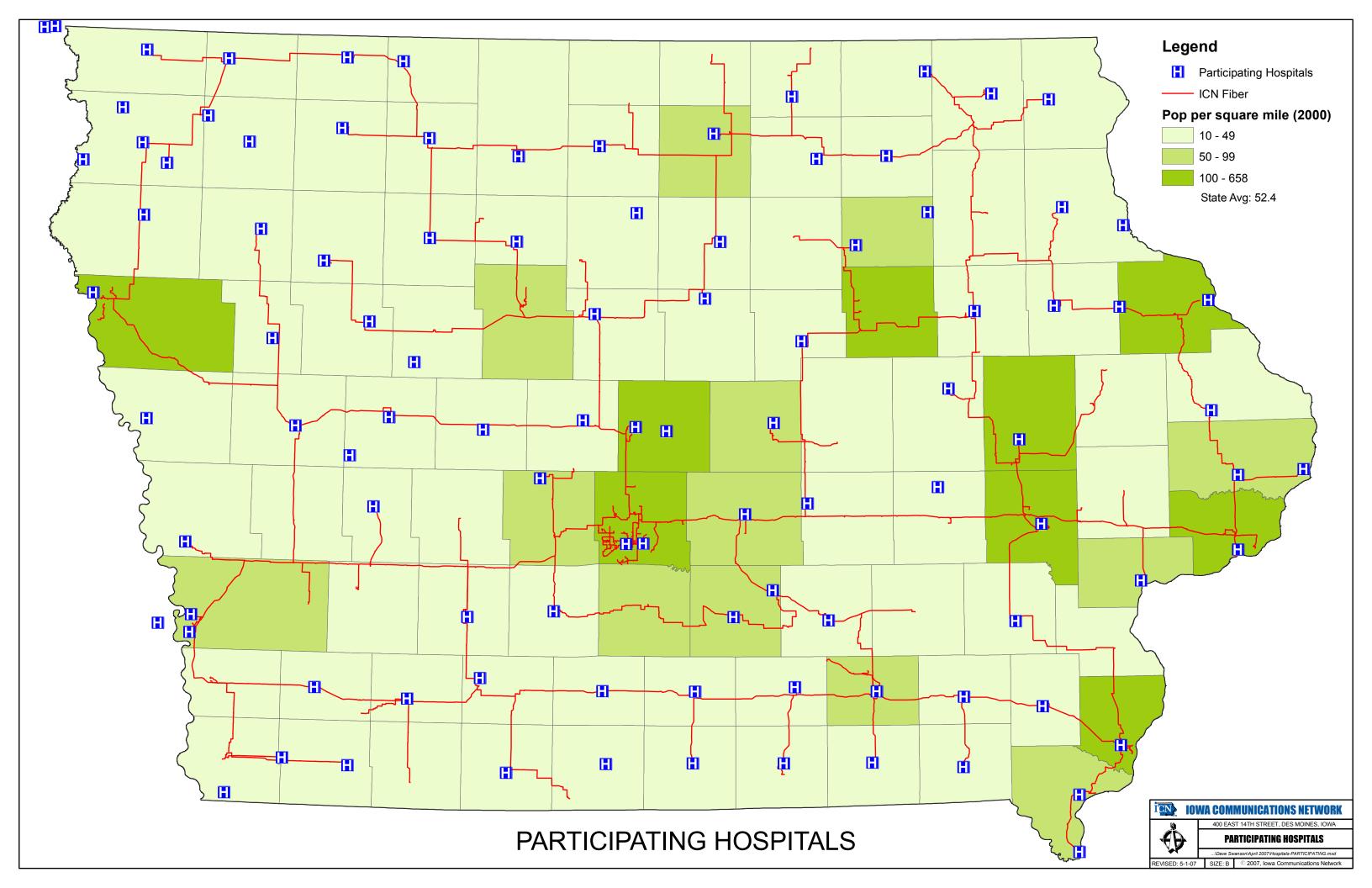
- 1. *Immediate results*. Our proposal can be implemented immediately after grant funding. Our needs assessment identifies in detail each part, process, and cost necessary for full implementation. The infrastructure to transport high speed services statewide is in place, and ready to accept one hundred (100) new health care locations. Internet2 service is also in place and ready to connect consortium members to any telemedicine application available on this nationwide backbone. The only steps remaining are to provide the last mile fiber connection for each of the collaborating hospitals and to implement new network electronics, providing a new dedicated, secure, statewide healthcare network.
- 2. *Significant benefits*. Iowa's current telehealth activity is robust in hospitals that already possess high speed access. The next logical step is to connect smaller hospitals, especially in rural communities, to further enable telehealth and telemedicine collaboration. Upon



- implementation, the consortium's proposal results in delivering on the promise of broadband by forming a statewide network connecting ninety-one percent (91%) of Iowa's rural hospitals to the remote resources they require. A comprehensive healthcare network, coupled with a uniform cost effective service and the elimination of bandwidth limitations will enable the delivery of vital telemedicine services regardless of a patient's location.
- 3. Attainable goal. A reasonable dedication of financial resources, building on existing infrastructure in a collaborative manner, is all that is required to attain the project goals. Our needs assessment indicates \$11.7 million is sufficient, with eighty-five percent (85%) seed money support, to complete the statewide network connecting one hundred (100) hospitals. The consortium will utilize current fiber assets and wavelengths to form a new dedicated ten (10) gigabit network using proven IP/MPLS and Ethernet technology.
- 4. *Sustainable program*: The Iowa Hospital Association (IHA) has a proven track record of building collaboration among Iowa hospitals. The Iowa Communications Network (ICN) has a proven track record of administering high-speed, low-cost telecommunications throughout the state. The ICN currently provides services to over forty (40) healthcare facilities in Iowa with on-network circuits providing some of the most cost effective telehealth services available in the state. By leveraging current organizations and infrastructure, the consortium has a very cost effective sustainable business model providing a uniform, non-mileage sensitive service throughout Iowa.
- 5. *Meets grant objectives and proposal requirements*: This proposal addresses each of the eleven (11) FCC docket requirements with additional details in the addendum. The consortium believes the goals of the proposed project closely align with the FCC's objectives to facilitate high-speed connections between hospitals to enable higher quality patient care for rural Americans, lower healthcare delivery costs, provide vital links for disaster preparedness and emergency response, and supply a conduit for a national electronic medical records system.

#### **Conclusion**

The Iowa consortium proposes to implement a dedicated, resilient, broadband network linking one hundred (100) hospitals to healthcare resources in the state and throughout the nation. This network will represent one of the largest public - private partnerships in the Midwest, and will improve the lives of Iowans. The proposed project will impact the viability of rural hospitals and the communities they serve by extending the important services the hospitals provide to patients, and the significant economic influence they have in their communities. The consortium respectfully asks the Federal Communications Commission to fully fund this proposal.





# **CRITERIA SECTION (1) - ORGANIZATION IDENTITY**

- 1. **Introduction and background:** The Iowa Rural Health Telecommunications Program (IRHTP) is a voluntary consortium of ninety-seven (97) Iowa hospitals, one (1) Nebraska hospital, two (2) South Dakota hospitals and the Iowa Hospital Association (IHA). For the purpose of this program the IHA will be the organization legally and financially responsible for the conduct of activities supported by Federal Communications Commission funds.
  - a. The Iowa Rural Health Telecommunications Program (IRHTP) is comprised of public and non-profit hospitals that primarily serve rural areas. An Iowa workgroup with representatives from rural Iowa hospitals, the Iowa Hospital Association, several regional health networks, Midwest Rural Telemedicine Consortium, the Iowa Department of Public Health and the Iowa Communications Network, have been meeting since November 2006 to assess and formulate a statewide program to connect willing Iowa hospitals to a single broadband network. The IRHTP has performed a needs assessment for rural hospitals in Iowa and constructed a plan to leverage existing technology and assets to adopt the most efficient and cost effective means of connecting each hospital to a broadband network. This highly sustainable model will deliver broadband connections that can be used immediately by Iowa hospitals. The consortium has coordinated its efforts with other regional broadband networks including HUBNet and Sanford Communications and Collaboration Channels. IRHTP will continue to collaborate with healthcare systems and consortiums to enhance healthcare services in the upper Midwest region.
  - b. The Iowa Hospital Association (IHA) is a voluntary institutional membership organization representing hospital and health system interests to business, government and consumer audiences. IHA informs and helps shape health policy; fosters new forms of health care delivery; gathers and analyzes clinical utilization and financial data and monitors health care payment systems. Currently, all one hundred seventeen (117) short-term acute care Iowa hospitals are members of IHA.
    - IHA is a voluntary (501-c (6)) nonprofit corporation that exists to serve the public by serving hospitals and integrated health systems. The association and its membership are bonded by a common goal the promotion, attainment and maintenance of the health and well-being of Iowa people and communities.
    - The mission of IHA is to represent Iowa hospitals and support them in achieving their missions and goals. IHA's vision is to be Iowa's most trusted, respected and influential leader in health policy and advocacy as well as a valued resource for information and education. The IHA works with member hospitals to improve delivery, organization and management of health care services.
    - IHA has two subsidiary corporations: The Iowa Hospital Education and Research Foundation (IHERF) and ServiShare of Iowa, Inc. (SSI). IHERF is the Association's research and educational foundation. IHERF is a charitable non-profit entity which is exempt from federal income tax under section 501(c)(3) of the IRS Code. ServiShare is the Iowa Hospital Association's not-for-profit, taxable subsidiary which provides an array of fee supported



programs including, insurance products and a group purchasing program for IHA members.

c. The Iowa Communications Network (ICN) is Iowa's state owned fiber network that covers all 99 counties delivering data services, high-speed Internet, voice service, and video meetings for people in education, health care, public safety, homeland security, and other government agencies. The ICN is recognized as a common carrier and provides services to authorized users over a restricted access network. For over 12 years, the ICN's 3,000 miles of buried fiber, redundant network backbone, and its 24 hour Network Operations Service (NOC) have provided secure, reliable access during inclement weather, natural disasters, and crisis scenario training. Through partnership the ICN brings live full motion video to 773 classrooms around Iowa, located in schools, armories, libraries, hospitals, and federal and state government offices.

The ICN currently provides video conferencing and data networking services for Iowa Homeland Security Emergency Management Division (HSEMD) and its State Emergency Operations Center. Iowa is in the midst of a planning process for statewide radio interoperability. The early interoperability design assumptions include using the ICN as an interconnect medium for a statewide trunked land mobile radio system serving all political sub-divisions. The consultant's first report is due June 2007. The ICN also provides services for the Iowa Department of Public Health and it Health Alert Network (HAN). The HAN provides Iowa's hospitals and county public health offices a statewide trunked radio system that is fully integrated into the State Emergency Operations Center and interoperable with eight other state agencies on a selective basis. HAN also provides an automated notification system and collaborative tools for use during emergency events. Please see Appendix D for further detail.

2. Iowa Rural Health Telecommunications Program Objectivity: The IRHTP will be competitively neutral (not favoring one provider or technology over another), technically feasible (not requiring development of new technology), and economically feasible. The RFP process will allow the consortium to receive competitive offers for fiber facilities from independent phone companies, local exchange carriers, cable operators, municipalities, and others. These competitive offers will be weighed against installing a new last mile fiber connection from each hospital to the fiber backbone. The RFP process coupled with leveraging the State of Iowa's current networking assets will ensure an economically reasonable statewide healthcare network.



# **CRITERIA SECTION (2) - GOALS AND OBJECTIVES**

The purpose of the IRHTP program is to improve equity, access, quality, security and efficiency of medical services in rural Iowa through the use of various telehealth and telemedicine applications. IRHTP's vision is to have all Iowa hospitals connected to a secure, resilient broadband network with Internet2 access by 2010. This state wide healthcare network will provide a cost effective Ethernet service and up to one (1) gigabit of capacity to each site.

The IRHTP has organized the program according to five (5) values:

- Equity
- Access
- Quality
- Security
- Efficiency.

The IRHTP will demonstrate how this fiber optic network will be used to provide improved healthcare services and extend the successful track record of telecommunications use by implementing a statewide broadband fiber network with ninety-seven (97) Iowa hospitals, one (1) Nebraska hospital and two (2) South Dakota hospitals.

# 1. Iowa Rural Health Telecommunications Program Goals EQUITY

- a. By 2010, connect all Iowa hospitals to a secure, reliable broadband network with Internet2 connectivity.
- b. Provide hospitals will use the increased bandwidth for applications of their choosing.
- c. Introduce user choice in rural area(s) that may not have cost effective broadband service.

#### ACCESS

- a. Improve access to quality medical service in rural Iowa through the use of various telemedicine applications using an Iowa broadband network.
- b. Improve access to and availability of clinical and administrative information and education programming.
- c. Improve connectivity of Iowa hospitals with parent health systems located in surrounding states.

#### **QUALITY**

- a. Provide more timely diagnosis and initiation of appropriate treatment or transfer of patients in rural Iowa communities.
- b. Provide rapid access to, and transmission of, patient data and information between Iowa hospitals improving coordination and quality of patient care.
- c. Facilitate reporting of clinical quality data to various local, state and federal government agencies and payers.



#### **SECURITY**

- a. Improve terrorism and disaster preparedness and response through communication interoperability and redundancy with Iowa Homeland Security and Emergency Management and the Iowa Department of Public Health.
- b. Provide telecommunications backup/redundancy in a disaster or public health emergency.

#### **EFFICIENCY**

- a. Leverage current, proven State of Iowa assets, to extend broadband service to rural hospital throughout Iowa.
- b. Utilize current Internet2 services to provide regional and national healthcare connections.
- c. Continue and extend collaboration with Iowa Homeland Security and Emergency Management to include on-network connections.

#### 2. Iowa Rural Health Telecommunications Program Objectives:

- a. Solicit bids and award contracts for:
  - i. Network connectivity and final design studies.
  - ii. Installation of fiber optic cable from the community endpoint to the hospital and acquisition and installation of endpoint equipment.
  - iii. Installation of core electronics creating a ten (10) gigabit dedicates resilient network backbone.
  - iv. Conduct and complete hospital connectivity design and cost studies.
- b. Finalize the project costs to include:
  - i. Fiber installation (estimated at \$7,704,050)
  - ii. Access network electronics (estimated at \$1,779,072)
  - iii. Core network electronics (estimated at \$2,221,510)
  - iv. Identify required changes to hospital routers and or firewalls to ensure appropriate access in each location
  - v. Network design, system architecture, and connectivity costs
  - vi. Program administrative costs (including project manager and funds accounting)
  - vii. Identify specific data service to install and associated hospital operational fees
- c. Complete fiber installation to include: install access edge, aggregation, and core network electronics.
- d. Meet with hospital to design required data services.
- e. Turn up circuits connecting each hospital to services and resources requested.
- f. Continue to demonstrate sustainability of the network.
- g. Identify best practice applications.
- h. Assist Iowa hospitals as they seek ways to improve access to telemedicine and telehealth programs/applications through use of the dedicated network.
- i. Work with neighboring state health system(s) to identify and install the most efficient and effective method of connecting their Iowa hospital(s) within the multi-state network(s).
- j. Identify and secure other sources of funding to cover the portion of the project not covered by the FCC Pilot funds.



k. Identify strategies to include other healthcare providers.

### 3. Additional telecommunications benefits for hospitals:

- Reduce ongoing communications costs for hospitals through consolidation of existing telecommunications lines.
- Improve flexibility in the use of network capacity (bandwidth) by individual hospital based on need.
- Improve communication interoperability between federal, state and local government, first responders and Iowa hospitals.
- Provide new access options to the Internet and Internet2
- Increased bandwidth (up to 1 gigabit) for future telehealth and telemedicine applications.



# **CRITERIA SECTION (3) - TOTAL COST FOR EACH YEAR**

To enable higher quality patient care, facilitate the deployment of new applications, and provide an efficient communications conduit IRHTP proposes deploying a dedicated, resilient, high capacity statewide network connecting rural and urban hospitals. Systems were designed and detailed cost estimates were created to connect each of the one hundred (100) consortium members to the network through a statewide needs analysis process. Network cost modules include "last mile" fiber installation, edge network electronics, aggregation network systems and core network electronics. A summary of each of these modules as related to Iowa program costs, costs per program year and costs based on an FCC funding level of eighty-five percent (85%) are as follows:

Overall Iowa Program Costs					
Fiber Construction	Edge/Aggregation Electronics	Core Net Electronics	Project Total		
\$7,704,050	\$1,779,072	\$2,221,510	\$11,704,632		
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Cost per Program Year							
FY 2008							
Fiber Construction	Edge/Aggregation Electronics	Core Net Electronics	Total FY 2008				
\$3,802,650	\$330,376 \$2,221,510		\$6,354,563				
	FY 200	)9					
Fiber Construction	Edge/Aggregation Electronics		Total FY 2009				
\$3,901,700	\$1,448,696	\$0	\$5,350,096				

Cost Allocation by Funding Source					
	Pilot Project Fu	ınds - 85%			
Fiber Construction	Edge/Aggregation Electronics	Core Net Electronics	Total Funding		
\$6,548,443	\$1,512,211	\$1,888,284	\$9,948,937		
	Consortium Fu	nds - 15%			
Fiber Construction	Edge/Aggregation Electronics	Core Net Electronics	Total Funding		
\$1,155,607	\$266,861	\$333,226	\$1,755,695		

1. Network Design: The proposed network design assumes a fiber build-out from the rural healthcare providers' facilities to the carrier's closest appropriate Point of Presence (POP). An Ethernet/MPLS edge device will provide a one (1) gigabit trunk from the hospital to the carriers closest POP. At the carrier POP the optical signal is converted to an ITU grid compatible wavelength and multiplexed onto a Course Wave Division Multiplexing (CWDM) transport network. The CWDM wavelength services may connect directly to an aggregation



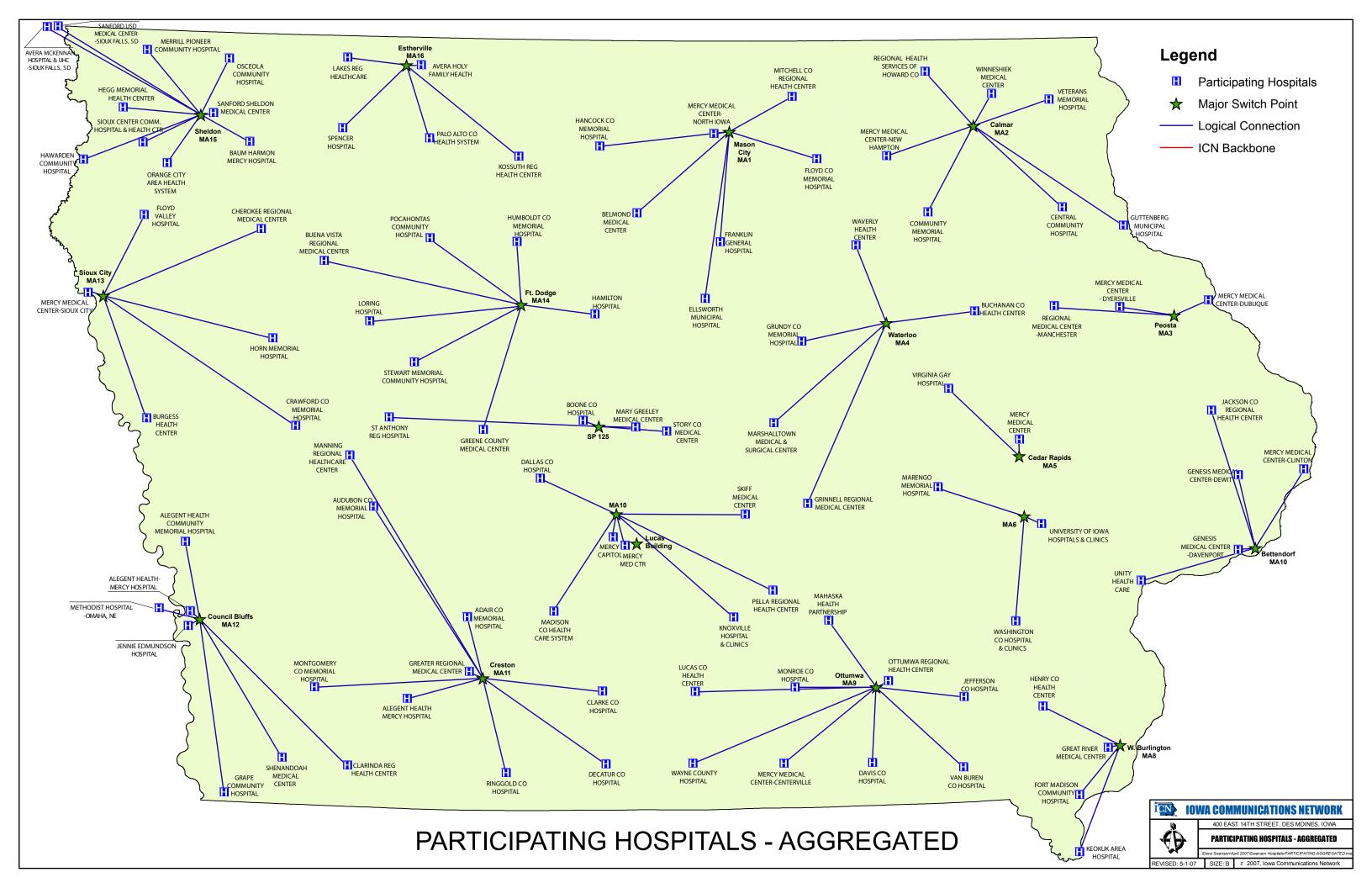
site or may pass through multiple regeneration sites prior to terminating at one of nineteen (19) major switching sites. At the switch site, all CWDM traffic is de-multiplexed and terminated on an MPLS core/aggregation switch. The MPLS device aggregates all data flows and tunnels data as appropriate through ten (10) gigabit MPLS trunks. Optics for each ten (10) gigabit trunk forms the signal into an ITU grid compatible Dense Wave Division Multiplexing (DWDM) wavelength for transmission. Each of the nineteen (19) MPLS core/aggregation sites are then interconnected via an existing DWDM infrastructure to form a resilient statewide backbone. Please see Appendix A (Regional Maps) and B (Detailed Project Plan) for further network design details.

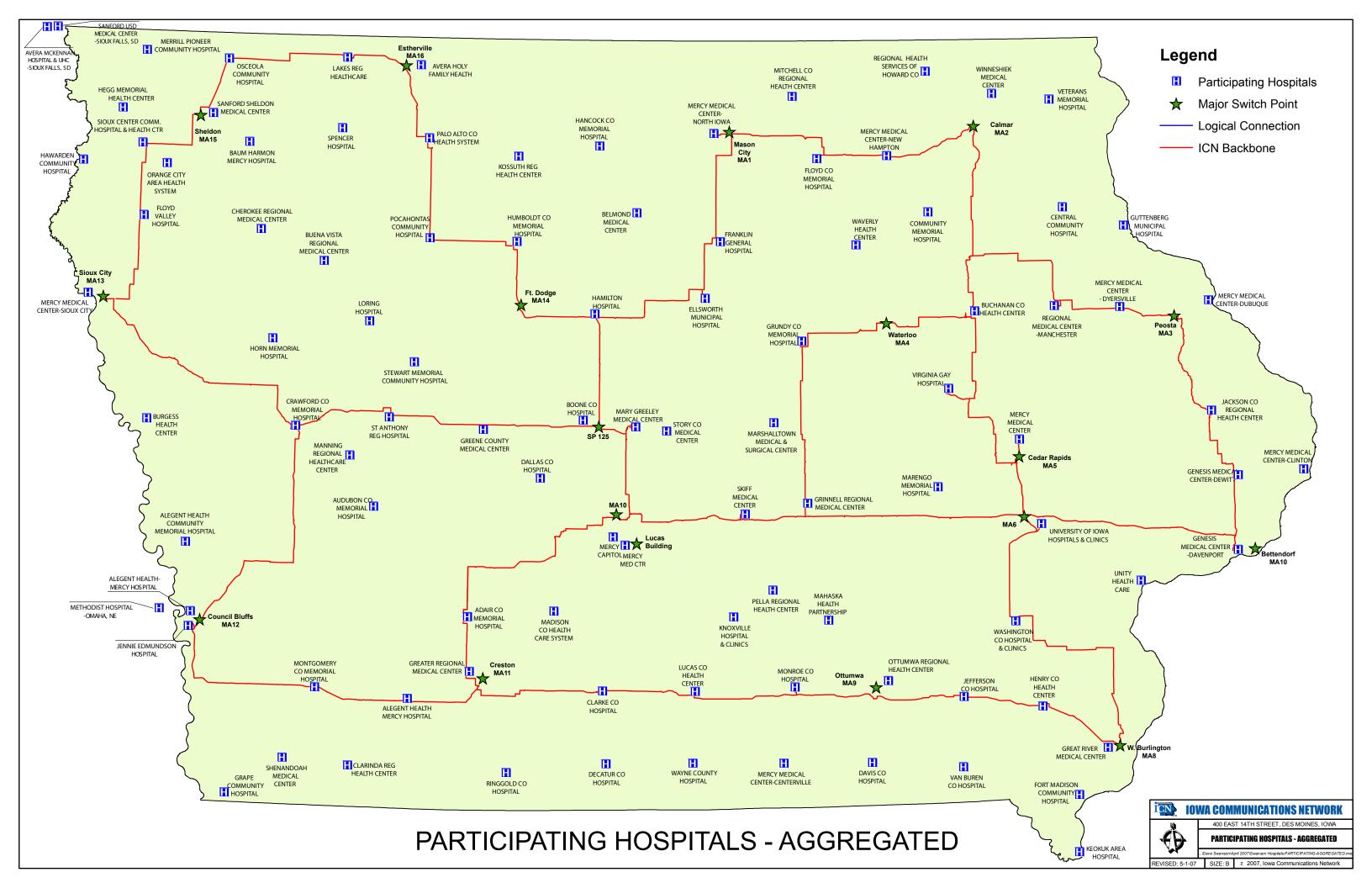
- 2. Network Services: Each hospital will be provided a minimum one (1) gigabit network uplink to meet current and future application requirements. Available connections will include multiple 10/100/1000 Ethernet ports and at least one T-1 interface for H.320 video conferencing requirements. Initially the MPLS network will provide a Virtual Leased Line (VLL) service and in some cases a Virtual Private LAN Service (VPLS) to each of the consortium's hospitals. Future enhancements may include IP VPNs and a statewide healthcare Intranet to gain further bandwidth efficiencies.
- **3. Hospital Capital Costs:** As expected the "last mile" fiber build-out cost is the most expensive component of the consortium's proposal. Median fiber construction cost for the 100 sites is expected to be \$51,250 with four of the ninety-five (95) sites having costs in excess of \$330,000 each or an aggregate cost of \$2.023 million. The IRHTP will be searching for creative solutions and partnerships during the RFP process to mitigate the disproportionate financial burden these last mile connections may place on each consortium member. The IRHTP members understand that at least fifteen percent (15%) of the project construction costs will have to be covered by other sources of funding.

Two hospitals in South Dakota and one hospital in Nebraska are members of this consortium. At this time the consortium has not requested funding for fiber connections to the hospitals in Sioux Falls, South Dakota. The consortium will continue to pursue cost effective collaborative means to connect these hospitals to the IRHTP network.

Other additional unfunded costs (to be paid with non-FCC funds) include general administrative costs, development and program administrative costs, and any indirect expenses. Additionally, hospitals may need to upgrade or purchase new routers to provide the additional Ethernet interfaces for connection to the new dedicated healthcare network. Router upgrades are estimated at \$500 to \$2,000 depending on the age of existing equipment. The IRHTP is not requesting funding for router upgrades as part of this network infrastructure application.

**4. Hospital Operational Costs:** The cost of maintaining the new last mile fiber connections, network electronics, co-location fees and wavelength service fees will be covered by standardized monthly connection and bandwidth fees. Monthly fees could be offset by the consolidation of network services, centralization of data networking resources or new healthcare services enabled by a cost effective high bandwidth network.







# **CRITERIA SECTION (4) FOR-PROFIT PARTICIPATION**

Currently, Iowa does not have any for-profit short term acute care hospitals. All Iowa hospitals are private, not-for-profit, or publicly held organizations. However, the consortium would not exclude for-profit facilities from participating in the telecommunications network. These for-profit organizations would have to fund one hundred percent (100%) of their Telecommunications installation cost.

### CRITERIA SECTION (5) SOURCES FOR UNCOVERED FUNDS

Each participating hospital in this program understands that at least fifteen (15) percent of the cost to establish the broadband network will have to be self-funded. The hospitals listed in the application understand potential cost liabilities and have voluntarily elected to participate. The Iowa Hospital Association and other organizations across the state will continue to seek funding from other sources that could assist in the unfunded portion of this project. These funding sources could include, but are not limited to, the US Department of Agriculture, Iowa Department of Economic Development, Iowa Department of Homeland Security and Emergency Management, state appropriations and private grant opportunities.



# CRITERIA SECTION (6) PARTICIPATING HEALTH CARE FACILITIES

The following comprehensive list includes consortium members from rural and urban Iowa hospitals along with urban hospitals in Nebraska and South Dakota.

#### **Participating Healthcare Facilities**

MARY GREELEY MEDICAL CENTER
MONROE COUNTY HOSPITAL
KOSSUTH REGIONAL HEALTH CENTER
AUDUBON COUNTY MEMORIAL HOSPITAL
BELMOND MEDICAL CENTER
DAVIS COUNTY HOSPITAL
BOONE COUNTY HOSPITAL
HANCOCK COUNTY MEMORIAL HOSPITAL
ST ANTHONY REGIONAL HOSPITAL
MERCY MEDICAL CENTER-CEDAR RAPIDS
MERCY MEDICAL CENTER-CENTERVILLE
LUCAS COUNTY HEALTH CENTER
FLOYD COUNTY MEMORIAL HOSPITAL
CHEROKEE REGIONAL MEDICAL CENTER
CLARINDA REGIONAL HEALTH CENTER
MERCY MEDICAL CENTER-CLINTON
ALEGENT HEALTH
MERCY HOSPITAL - CORNING
WAYNE COUNTY HOSPITAL
ALEGENT HEALTH-MERCY HOSPITAL – COUNCIL BLUFFS
JENNIE EDMUNDSON HOSPITAL
REGIONAL HEALTH
SERVICES OF HOWARD COUNTY
GREATER REGIONAL MEDICAL CENTER
GENESIS MEDICAL CENTER
WINNESHIEK MEDICAL CENTER
CRAWFORD COUNTY MEMORIAL HOSPITAL
MERCY MEDICAL CENTER-DES MOINES
MERCY MEDICAL CENTER-MERCY CAPITOL
GENESIS MEDICAL CENTER-DEWITT
MERCY MEDICAL CENTER-DUBUQUE
MERCY MEDICAL CENTER – DYERSVILLE
CENTRAL COMMUNITY HOSPITAL
PALO ALTO COUNTY HEALTH SYSTEM
AVERA HOLY FAMILY HEALTH

JEFFERSON COUNTY HOSPITAL
FORT MADISON COMMUNITY HOSPITAL
ADAIR COUNTY MEMORIAL HOSPITAL
GRINNELL REGIONAL MEDICAL CENTER
GRUNDY COUNTY MEMORIAL HOSPITAL
GUTTENBERG MUNICIPAL HOSPITAL
GRAPE COMMUNITY HOSPITAL
FRANKLIN GENERAL HOSPITAL
HAWARDEN COMMUNITY HOSPITAL
HUMBOLDT COUNTY MEMORIAL HOSPITAL
HORN MEMORIAL HOSPITAL
BUCHANAN COUNTY HEALTH CENTER
UNIVERSITY OF IOWA HOSPITALS & CLINICS
ELLSWORTH MUNICIPAL HOSPITAL
GREENE COUNTY MEDICAL CENTER
KEOKUK AREA HOSPITAL
VAN BUREN COUNTY HOSPITAL
KNOXVILLE HOSPITAL & CLINICS
STEWART MEMORIAL
COMMUNITY HOSPITAL
FLOYD VALLEY HOSPITAL
DECATUR COUNTY HOSPITAL
REGIONAL MEDICAL CENTER
MANNING REGIONAL HEALTHCARE CENTER
JACKSON COUNTY
REGIONAL HEALTH CENTER
MARENGO MEMORIAL HOSPITAL
MARSHALLTOWN MEDICAL & SURGICAL CENTER
MERCY MEDICAL CENTER-NORTH IOWA
ALEGENT HEALTH
COMMUNITY MEMORIAL HOSPITAL
RINGGOLD COUNTY HOSPITAL
HENRY COUNTY HEALTH CENTER
UNITY HEALTHCARE
STORY COUNTY MEDICAL CENTER



MERCY MEDICAL CENTER-NEW HAMPTON	OSCEOLA COMMUNITY HOSPITAL
SKIFF MEDICAL CENTER	SIOUX CENTER COMMUNITY
BURGESS HEALTH CENTER	HOSPITAL & HEALTH CENTER
ORANGE CITY AREA HEALTH SYSTEM	MERCY MEDICAL CENTER-SIOUX CITY
MITCHELL COUNTY	SPENCER HOSPITAL
REGIONAL HEALTH CENTER	LAKES REGIONAL HEALTHCARE
CLARKE COUNTY HOSPITAL	BUENA VISTA REGIONAL MEDICAL CENTER
MAHASKA HEALTH PARTNERSHIP	COMMUNITY MEMORIAL HOSPITAL
OTTUMWA REGIONAL HEALTH CENTER	VIRGINIA GAY HOSPITAL
PELLA REGIONAL HEALTH CENTER	GREAT RIVER MEDICAL CENTER
DALLAS COUNTY HOSPITAL	WASHINGTON COUNTY HOSPITAL & CLINICS
POCAHONTAS COMMUNITY HOSPITAL	VETERANS MEMORIAL HOSPITAL
BAUM HARMON MERCY HOSPITAL	WAVERLY HEALTH CENTER
MONTGOMERY COUNTY	HAMILTON HOSPITAL
MEMORIAL HOSPITAL	MADISON COUNTY HEALTH CARE SYSTEM
MERRILL PIONEER COMMUNITY HOSPITAL	NEBRASKA METHODIST HOSPITAL
HEGG MEMORIAL HEALTH CENTER	AVERA MCKENNAN HOSPTIAL & UNIVERSITY
SANFORD SHELDON MEDICAL CENTER	HEALTH CENTER
LORING HOSPITAL	SANDFORD MEDICAL CENTER
SHENANDOAH MEDICAL CENTER	



# CRITERIA SECTION (7) ADDRESSES, ZIP CODE, RURAL URBAN COMMUNTING AREA AND PHONE NUMBER

The following consortium members represent both independent and affiliated hospitals. Affiliated hospitals represent ten (10) healthcare networks from Iowa, Nebraska and South Dakota.

Facility Name	Address	City	St.	Zip	Phone	RUCA
Mary Greeley Medical Center	1111 Duff Ave	Ames	ΙA	- ·	515-239-2011	1
Monroe County Hospital	6580 165th St	Albia	IΑ		641-932-2134	7
Kossuth Regional		1.10				
Health Center	1515 S. Phillips St	Algona	IΑ	50511	515-295-2451	7
Audubon County						
Memorial Hospital	515 Pacific St	Audubon	IA		712-563-2611	10
Belmond Medical Center	403 1 <sup>st</sup> St SE	Belmond	IΑ	50421	641-444-3223	10
Davis County Hospital	507 North Madison	Bloomfield	ΙA	52537	641-664-2145	10.5
Boone County Hospital	1015 Union St	Boone	ΙA	50036	515-432-3140	4.2
Hancock County	-4					
Memorial Hospital	532 1 <sup>st</sup> St NW	Britt	IA	+	641-843-5000	10.6
St Anthony Regional Hospital	311 S. Clark	Carroll	IA	51401	712-792-3581	7
Mercy Medical Center –						
Cedar Rapids	701 10th St SE	Cedar Rapids	IA	52403	319-398-6011	1
Mercy Medical Center – Centerville	One St. Joseph's Dr.	Centerville	ΙA	52544	641-437-4111	7
	1200 N. 7th St		-		641-774-3000	7
Lucas County Health Center Floyd County	1200 N. 7th St	Chariton	IA IA	50049	515-228-6230	/
Memorial Hospital	700 11th St	Charles City	I'A	50616	313-226-6230	7
Cherokee Regional	700 114100	Onance Oity		00010		,
Medical Center	300 Sioux Valley Drive	Cherokee	IΑ	51012	712-225-5101	7
Clarinda Regional	823 South 17th St, PO					
Health Center	Box 217	Clarinda	ΙA	51632	712-542-2176	7
Mercy Medical Center-Clinton	1410 N. Fourth St	Clinton	IΑ	52732	563-244-5555	4
Alegent Health Mercy Hospital	603 Rosary Drive	Corning	IΑ	50841	641-322-3121	10
Wayne County Hospital	417 S. East St	Corydon	IΑ	50060	641-872-2260	10
Alegent Health-Mercy Hospital	800 Mercy Drive	Council Bluffs	IΑ	51503	712-328-5000	1
Jennie Edmundson Hospital	933 East Pierce St	Council Bluffs	IΑ	51503	712-396-6000	1
Regional Health						
Servicesof Howard County	235 Eight Ave West	Cresco	IΑ	52136	563-547-2101	7
Greater Regional						
Medical Center	1700 W. Townline St	Creston	IA	+	641-782-7091	7
Genesis Medical Center	1227 East Rusholme St	Davenport	IA	52803	563-421-1000	1
Winneshiek Medical Center	901 Montgomery St	Decorah	ΙA	52101	563-382-2911	7
Crawford County			1			
Memorial Hospital	2020 First Ave South	Denison	IA	51442	712-263-5021	7
Mercy Medical Center – Des Moines	602 Foot 12th St	Dog Mainag	1.0	50200	E1E 242 2E04	1
nes Mollies	603 East 12th St	Des Moines	IΑ	50309	515-243-2584	1



Facility Name	Address	City	St.	Zip	Phone	RUCA
Mercy Medical Center –						
Mercy Capitol	1111 Sixth Ave	Des Moines	IA	50314	515-247-3121	1
Genesis Medical Center –	4b					
Dewitt	1118 11 <sup>th</sup> St	DeWitt	IA	52742	563-659-4200	7.3
Mercy Medical Center –						
Dubuque	250 Mercy Drive	Dubuque	IA	52001	563-589-8000	1
Mercy Medical Center –	4444 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D		50040	500 075 7404	7.0
Dyersville	1111 3rd St SW	Dyersville	IA		563-875-7101	7.3
Central Community Hospital	901 Davidson St NW	Elkader	IA	52043	563-245-7000	10
Palo Alto	2004 5: 4 04			50500	740 050 5500	_
County Health System	3201 First St	Emmetsburg	IA		712-852-5500	7
Avera Holy Family Health	826 North Eighth St	Estherville	IA	51334	712-362-2631	7.4
Jefferson County Hospital	400 Highland Ave	Fairfield	IΑ	52556	64-472-4111	7
Fort Madison						
Community Hospital	5445 Avenue O	Fort Madison	IΑ	52627	319-376-2250	4
Adair County Memorial						
Hospital	609 S. E. Kent	Greenfield	IA	50849	641-743-2123	10
Grinnell Regional Medical						_
Center	210 Fourth Ave	Grinnell	IA	50112	641-236-7511	7
Grundy County Memorial				50000	040 004 5404	4.0
Hospital	201 East J Ave	Grundy Center	IA	50638	319-824-5421	10
Cuttonborn Municipal Heavital	2nd and Main St PO Box	Cuttombour		50050	ECO 0EO 4404	40
Guttenberg Municipal Hospital		Guttenberg	IA		563-252-1121	10
Grape Community Hospital	2959 Highway 275	Hamburg	IA	1	712-382-1515	10.4
Franklin General Hospital	1720 Central Ave	Hampton	IA	50441	641-465-5000	7
Hawarden					712-551-3100	
Community Hospital	1111 11th St	Hawarden	IA	51023		10.6
Humboldt County						
Memorial Hospital	1000 North 15th St	Humboldt	IA	1	515-332-4200	7.4
Horn Memorial Hospital	701 East Second St	Ida Grove	IA	51445	712-364-3311	10
Buchanan						
County Health Center	1600 First St East	Independence	IA	50644	319-334-6071	7.3
University of Iowa		0.4		500.40	040 050 0045	
Hospitals & Clinics	200 Hawkins Drive	Iowa City	IA	1	319-356-3945	1
Ellsworth Municipal Hospital	100 Rockslvania Ave	Iowa Falls	IA	50126	641-648-4631	7
Greene County						_
Medical Center	1000 West Lincoln Way	Jefferson	IA		515-386-2114	7
Keokuk Area Hospital	1600 Morgan St	Keokuk	IA	52632	319-524-5317	4
Van Buren County Hospital	304 Franklin St, Box 70	Keosauqua	IΑ	52565	319-293-3171	10.6
Knoxville Hospital & Clinics	1002 South Lincoln St	Knoxville	IΑ	50138	641.842.2151	7.3
Stewart Memorial						
Community Hospital	1301 West Main St	Lake City	IΑ	51449	712-464-3171	10.6
	714 Lincoln St NE, Hwy 3					
Floyd Valley Hospital	East	Le Mars	IA	51031	712-546-7871	7.3
Decatur County Hospital	1405 NW Church St	Leon	IA	50144	641-446-4871	10.6
Regional Medical Center	709 West Main St	Manchester	ΙA	52057	563-927-3232	7
Manning Regional						
Healthcare Center	410 Main St	Manning	IΑ	51455	712-655-2072	10.6



Facility Name	Address	City	St.	Zip	Phone	RUCA
Jackson County						
Regional Health Center	700 West Grove St	Maquoketa	IA	52060	563-652-2474	7
Marengo Memorial Hospital	300 West May St	Marengo	ΙA	52301	319-642-5543	10.4
Marshalltown						
Medical & Surgical Center	3 South 4th Ave	Marshalltown	IA	50158	641-754-5181	4
Mercy Medical Center –	4000 Farmels Of CM	Manage Oite		50404	044 400 7000	
North Iowa	1000 Fourth St SW	Mason City	IA	50401	641-422-7000	4
Alegent Health Community Memorial Hospital	631 North 8th St	Missouri Valley	ΙA	51555	712-642-2784	7.1
Ringgold County Hospital	211 Shellway Drive	Mount Ayr	ΙA	50854	641-464-3226	10
Henry County Health Center	407 South White	Mount Pleasant	ΙA	52641	319-385-3141	7
Unity HealthCare	1518 Mulberry Ave	Muscatine	ΙA	52761	563-264-9100	4
Story County Medical Center	630 Sixth St	Nevada	ΙA	50201	515-382-2111	2
Mercy Medical Center –						
New Hampton	308 North Maple Ave	New Hampton	IΑ	50659	641-34-4121	7
	204 North Fourth Ave					
Skiff Medical Center	East PO Box 1006	Newton	IA	50208	641-792-1273	4
Burgess Health Center	1600 Diamond St	Onawa	ΙA	51040	712-423-2311	7.3
Orange City						
Area Health System	1000 Lincoln Circle SE	Orange City	IA	51041	712-737-5225	7
Mitchell County	C1C North Fighth Ct	Occas	١٨	E0464	644 722 6000	7.4
Regional Health Center	616 North Eighth St	Osage	IA		641-732-6000	7.4
Clarke County Hospital	800 South Fillmore	Osceloa	IA		641-342-2184	7.3
Mahaska Health Partnership	1229 C Ave East	Oskaloosa	IA	52577	641-672-3100	4
Ottumwa Regional Health Center	1001 Pennsylvania Ave	Ottumwa	IΑ	52501	641-684-2300	4
Pella Regional Health Center	404 Jefferson	Pella	IA		641-628-3150	7
			IA			
Dallas County Hospital Pocahontas	610 Tenth St	Perry	IA	50220	515-465-3547	7.3
Community Hospital	606 NW Seventh St	Pocahontas	IΑ	50574	712-335-3501	10
Baum Harmon Mercy Hospital		Primghar	IΑ	51245		10.6
Montgomery	200 1401111 44010117440	riingilai	17 (	01240	7 12 307 2000	10.0
County Memorial Hospital	2301 Eastern Ave	Red Oak	IΑ	51566	712-623-7000	7
Merrill Pioneer						
Community Hospital	801 South Greene St	Rock Rapids	ΙA	51246	712-472-2591	10.4
Hegg Memorial Health Center	1202 21st Ave	Rock Valley	ΙA	51247	712-476-8000	7
Loring Hospital	211 Highland Ave	Sac City	IΑ	50583	712-662-7105	10
Sanford Sheldon						
Medical Center	118 North 7th Ave	Sheldon	IA	51201	712-324-5041	7
Shenandoah Medical Center	300 Pershing Ave	Shenandoah	ΙA	51601	712-246-1230	7
Osceola Community Hospital	Ninth Ave North	Sibley	IA	51249	712-754-2574	7
Sioux Center Community						
Hospital & Health Center	605 South Main Ave	Sioux Center	IA	51250	712-7221271	7
Mercy Medical Center –	004 5:44 04	0:		E4400	740 070 0040	
Sioux City	801 Fifth St	Sioux City	IA	51102		1
Spencer Hospital	1200 First Ave East	Spencer	IA	51301	712-264-6198	
Lakes Regional Healthcare	2301 Hwy 71 PO Box AB	Spirit Lake	ΙA	51360	712-336-1230	4



Facility Name	Address	City	St.	Zip	Phone	RUCA
Buena Vista						
Regional Medical Center	1525 West Fifth St	Storm Lake	IΑ	50588	712-732-4030	4
Community Memorial Hospital	909 West First St	Sumner	ΙA	50674	563-578-3275	10
Virginia Gay Hospital	502 North Ninth Ave	Vinton	ΙA	52349	319-472-6200	7.3
Great River Medical Center	1221 South Gear Ave	W. Burlington	IΑ	52655	319-768-1000	4
Washington County Hospital & Clinics	400 East Polk St	Washington	IA	52353	319-653-5481	7.3
Veterans Memorial Hospital	40 First Ave SE	Waukon	IΑ	52172	563-568-3411	7
Waverly Health Center	312 Ninth St SW	Waverly	ΙA	50677	319-352-4120	7.3
Hamilton Hospital	800 Ohio St	Webster City	ΙA	50595	515-832-9400	7
Madison County Health Care System	300 West Hutchings St	Winterset	IA	50273	515-462-2373	7.1
Nebraska Methodist Hospital	8303 Dodge St	Omaha	NE	68114	402-354-4000	1
Avera Mckennan Hospital & Univ Health Center	800 East 21 <sup>st</sup> St	Sioux Falls	SD	57117	605-322-8000	1
Sanford Medical Center	1305 West 18 <sup>th</sup> St	Sioux Falls	SD	57105	605-571-1750	1

Other state and federal hospitals may benefit from connecting to the network in the future. Currently three Veterans Administration hospitals, four state mental health hospitals and the Department of Corrections are on-network with the ICN. In order to fully participate with consortium members, these facilities can either be bridged from the current ATM/SONET network to the new broadband network or the last mile access could be upgraded. The ICN also has facilities to a separate private Iowa healthcare network connecting seven (7) urban hospitals in the health system.



# CRITERIA SECTION (8) PREVIOUS EXPERIENCE IN DEVELOPMENT AND MANAGEMENT OF TELEMEDICINE

The Iowa Rural Health Telecommunications Program will enhance the previous experiences that several organizations across the state already demonstrate. This application provides examples of current telehealth applications in the state. Below is a listing of current functional uses for the organizations listed in this application.

#### **Current uses of telecommunications in Iowa**

Teleradiology	54
Video Conferencing	68
Telemedicine	37

Example A – See below how one urban, regional organization (University of Iowa Hospital and Clinics) has partnered with its regional rural organizations to provide better equity, access, quality, security and efficiency in the state of Iowa.

<b>Activity Name</b>	Activity Description	Sites Linked			
Pediatric Patient Educational Support	Videoconferencing over IP connections to the patient's classroom to keep the patient connected during extended hospital stays in conjunction with Patient Library and Educational Services.	Locations determined by need			
Neonatology Staff Support	With the hiring of on-site residents at the Genesis Medical Center, Davenport Iowa, the Department of Neonatology installed videoconferencing systems in urban clinic and at the staff room in Davenport.  Grand Rounds and patient cases are studied across				
Pediatric Echo-	the encrypted connection.  Provide on-going support for the Pediatric	Genesis Medical Center, Davenport Genesis Medical Center, Davenport			
cardiology	telemedicine project begun under NLM II. Perform	Mercy Medical Center, Dubuque			
	system troubleshooting for equipment located in	Mercy Medical Center, Mason City			
	urban pediatric clinic.	Covenant Medical Center, Waterloo			
		Ottumwa Regional Health Center			
		St. Lukes Hospital, Cedar Rapids			
		Great River Medical			
		Center, Burlington (future)			
Clinical Outreach	Support for the activities of the Clinical Outreach	Anamosa Correctional Facility			
Telemedicine	telemedicine services to remote clinics and correctional facilities. This involves troubleshooting	Clarinda Correctional Facility			
Support	connection and equipment problems and provides	Ft. Dodge Correctional Facility			
	technical support for new initiatives in telemedicine.	Iowa State Penitentiary			
	Clinical practices include Urology, Cardiology,	Iowa Correctional			
	Orthopeadics, and Virology. Otolaryngology is a	Institution for Women			
	future addition.	Mt. Pleasant Correctional Facility			
		Newton Correctional Facility			
		Iowa Medical and Classification Center			
		North Central Correctional Facility			



<b>Activity Name</b>	<b>Activity Description</b>	Sites Linked
Dialysis Clinic	In conjunction with Clinical Outreach: Prepare	Grinnell UIHC Dialysis Clinic
Videoconferencing	budgetary figures for Dialysis Clinic for installations	Gillileii Offic Diarysis Cillic
with Remote Sites	to support videoconferencing at their three remote	Washington UIHC Dialysis Clinic
	clinics; include equipment necessary to link with	
	UIHC; also include necessary peripheral devices as	Muscatine UIHC
	requested.	Dialysis Clinic (future)
Cardiology Clinical	Trial program with the UIHC Department of	
Services	Cardiology and Clinical Outreach to extend the	UIHC Clinic, Marengo
	University of Iowa Hospital and Clinic's (UIHC) to	
	remote sites connected through the UIHC WAN.	UIHC Clinic, Sigourney

Example B – See below how one group of hospitals (Midwest Rural Telemedicine Consortium) joined together in a network, in both rural and urban settings, has demonstrated the use of Telecommunications in many applications to improve the equity, access, quality, security and efficiency in the participating hospitals.

<b>Activity Name</b>	<b>Activity Description</b>	Sites Linked			
Distance Learning	rounds, specialty grand rounds in the areas of	Adair County Memorial Hospital			
		Audubon County Memorial Hospital			
		Belmond Medical Center			
	geriatrics, pediatrics, and trauma, conferences related to bioterrorism and homeland security, courses for	Clarinda Regional Health Center			
	continuing education credit and college credit. These	Davis County Hospital  Decatur County Hospital			
	educational opportunities originate from Iowa				
	hospitals, colleges and universities, state departments	Ellsworth Municipal Hospital			
	and federal agencies such as Centers for Disease	Floyd County Memorial Hospital			
	Control.	Franklin General Hospital			
		Hancock County Memorial Hospital			
		Kossuth Regional Health Center			
		Manning Regional Healthcare Center  Marshalltown			
		Medical & Surgical Center			
		Mercy College of Health Sciences			
		Mercy Medical Center – Centerville			
		Mercy Medical Center – Des Moines			
		Mercy Medical Center - Capitol			
		Mercy Medical Center – New Hampton			
		Mercy Medical Center – North Iowa			
		Mitchell County			
			Regional Health Center		
					Palo Alto County Hospital
		Regional Health Services of Howard County			
		-			
		Ringgold County Hospital			
		Story County Medical Center			
		Wayne County Hospital			



<b>Activity Name</b>	<b>Activity Description</b>	Sites Linked				
Dermatology Clinic	Interactive video sessions scheduled in rural locations allowing patients to see the dermatologist without leaving their community. To be expanded to	Audubon County Memorial Hospital				
	additional sites.	Manning Regional Healthcare Center				
Language	Offers access to language interpretation for deaf and	Mercy Medical Center – Des Moines				
Interpretation	hard of hearing patients. Certified staff. Interpreter training sessions offered.	Hancock County Memorial Hospital				
	training sessions offered.	Mercy Medical Center – North Iowa				
		Mercy Medical Center – Sioux City				
		Locations determined by need				
Kailo Breaks	Wellness initiative that supports the health and well-	Belmond Medical Center				
	being of colleagues	Ellsworth Municipal Hospital				
		Franklin General Hospital				
		Hancock County Memorial Hospital				
		Kossuth Regional Health Center				
		Mercy Medical Center – New Hampton				
		Mercy Medical Center – North Iowa				
		Mitchell County				
		Regional Health Center				
		Palo Alto County Hospital				
		Regional Health Services of Howard County				
Tele-consultation	Interactive video consultations in the following	Services of froward County				
rete consultation	specialty areas and are available on a request-by- request basis: burn, cardiology, dermatology, endocrinology, ENT, gastroenterology, general surgery, infectious disease, neonatology, nephrology,	Locations determined by need				
	neurology, obstetrics, oncology, orthopedics, pain management, pathology, plastic surgery, psychiatry, pulmonology, radiology, thoracic surgery, vascular surgery, neurosurgery					
Adult Echo -	Provides rapid transport for cardiac studies reducing	Davis County Hospital				
cardiology	the time needed to receive a diagnosis	Mercy Medical Center – Des Moines				
Tele-dialysis Visits	Offers support for managing patients on dialysis.	Ringgold County Hospital				
	Potential opportunity exists for extending service to	Wayne County Hospital				
	other sites.	Mercy Medical Center – Des Moines				

#### **Potential Hospital Applications for All Participants**

- Transmission of large sets of data/information (example: electronic medical record)
- Rapid (minutes versus hours) transmission of large clinical imaging files through:
  - Teleradiology/regional PACS systems
  - Mobile and fixed imaging applications
  - Remote pathology readings and diagnosis
  - Tele-pharmacy applications
- Telemedicine consulting via video-conferencing (doctor to patient) in areas of:
  - Specialty consultations
  - Emergency Department, psychiatric and stroke evaluations
  - Remote monitoring of ICU patients



- Communication with voice over IP (telephone system with centralized PBX)
- Education for:
  - Administrative staff (example: trustee educational programming and administrative meetings)
  - Clinical staff (example: grand rounds, disease specific briefings)
  - Distance learning for health professionals and students
  - Patients
- Electronic reporting facilitation to:
  - Center for Medicare and Medicaid Services (CMS)
  - Iowa Foundation for Medical Care (Iowa's Quality Improvement Organization)
  - Payers
  - State government (example: Iowa Homeland Security and Emergency Management, Iowa Department of Public Health, Department of Human Services, Department of Inspection and Appeals)
- Terrorism and Disaster Preparedness and Response communication through:
  - Public health surveillance and immunizations data bank tracking
  - Triage and hospital capacity status
  - Communications interoperability and redundancy



# **CRITERIA SECTION (9) PROJECT MANAGEMENT PLAN**

The Iowa Rural Health Telecommunications Program has outlined the project management plan including the project leadership, management structure, as well as the work plan schedule and budget. Management structure and an organizational chart have been place in section ten (10) of this application. The following summary discusses the project management approach and provides a rollup project management schedule. A detailed merged area project management plan can be found at the conclusion of this application in Appendix B.

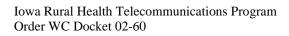
1. Project Approach: The IRHTP has chosen a "Design and Build" approach for infrastructure build-out for the proposed project. It is assumed that one prime contractor will bid the complete statewide fiber project and will secure the services of numerous outside plant subcontractors. The prime contractor is responsible for all the right-of-way (ROW) procurement and resolution of ROW issues. The prime contractor also has the flexibility to initiate various public-private ROW arrangements as the opportunities present themselves. Typically, these are "share the sheath" and "share the trench" arrangements. Other major duties of the prime contractor include acquiring city and county permits, securing all outside plant materials to complete the project, completing as-built drawings per site, documenting all fiber testing, and coordinating other related issues with the consortiums project manager.

The IRHTP has prioritized the build-out areas into what it considers a logical statewide workflow to meet the consortium's needs within the time permitted. The prime contractor will, however, receive latitude to proceed in a fashion maximizing its ability to economically mobilize and deploy its resources for the good of the IRHTP. The project plan divides work to be performed into merged areas. Seventeen merged areas were developed and represent the natural break between the access portion of the network and the aggregation/core network. The project plan assumes the prime contractor will start and complete several merged areas in fiscal year 2007 with the majority of the merged area outside plant work completed in fiscal year 2008. Installation of edge network electronics and CWDM access systems will follow completion, testing and acceptance of each last mile fiber link within the merged area. The installation of core electronics is not dependant on access portions of the network being completed. It is expected the procurement, testing, and installation of the core network electronics will proceed in parallel with the installation of sites in each merged area.

The IRHTP has adopted a "Link and Segment" approach to the test and acceptance of the network elements. A "segment" is the connection from an endpoint hospital to the nearest appropriate carrier Point of Presence (POP) in a city or county. A "link" is the connection from the carrier POP to the core switches regionally located within each merged area. Each link and segment will be tested for the specified fiber optic loss budget and appropriate bit error rate. All network core electronics as well as edge devices will be tested in a laboratory environment with manufactures engineers on site, before they are deployed to the field minimizing "out-of-box" failure issues.

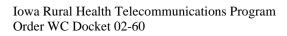


**2. Geographical Considerations:** In Iowa, the outside plant construction year is typically from March through November. By the end of November many outside plant contractors have shifted to projects in the warmer southern states. With this in mind, the project approach considers the limited time available from notice of grant award to the end of the CY 2007 construction period.





Hospital Name	MA	Days Work	Hospital Fiber Cost	EJ	Edge ectronics
GRINNELL REGIONAL MEDICAL CENTER	4	6.3		\$	22,960
MARSHALLTOWN MEDICAL & SURGICAL CENTER	4	2.5	\$ 10,000	\$	22,960
GRUNDY COUNTY MEMORIAL HOSPITAL	4	16.0		\$	20,000
		24.7	\$ 98,800	\$	65,920
UNIVERSITY OF IOWA HOSPITALS & CLINICS	6	0.0	<b>s</b> -	\$	12,288
WASHINGTON COUNTY HOSPITAL & CLINICS	6	22.0	•	\$	20,000
MARENGO MEMORIAL HOSPITAL	6	8.5		\$	20,000
		30.5	\$ 156,900	\$	52,288
ADAID COUNTY MEMORIAL HOORITAL	44	45.7	t ca.000		00.000
ADAIR COUNTY MEMORIAL HOSPITAL GREATER REGIONAL MEDICAL CENTER	11 11		\$ 62,800 \$ -	\$ \$	82,800 9,656
CLARKE COUNTY HOSPITAL	11	20.7		\$	120,340
			\$ 162,500	\$	212,796
LAKES REGIONAL HEALTHCARE	16	20.0		\$	100,000
PALO ALTO COUNTY HEALTH SYSTEM AVERA HOLY FAMILY HEALTH	16 16	4.4 15.9		\$ \$	43,140 73,056
KOSSUTH REGIONAL HEALTH CENTER	16	32.8		ъ \$	151,640
SPENCER HOSPITAL	16	8.1		\$	53,140
			\$ 329,400	\$	420,976
GREAT RIVER MEDICAL CENTER	8	9.0		\$	45,656
FORT MADISON COMMUNITY HOSPITAL HENRY COUNTY HEALTH CENTER	8 8	20.4 14.7		\$ \$	149,000 78,900
KEOKUK AREA HOSPITAL	8	14.7		\$	70,500
			\$ 280,900	\$	351,196
MERCY MEDICAL CENTER-CLINTON	7	8.1		\$	53,040
GENESIS MEDICAL CENTER - East Campus UNITY HEALTHCARE	7 7	22.7 17.8		\$ \$	100,356 91,640
GENESIS MEDICAL CENTER-DEWITT	7	28.8		ъ \$	114,804
JACKSON COUNTY REGIONAL HEALTH CENTER	7	16.5	. ,	\$	86,640
GENESIS MEDICAL CENTER - West Central Campus	7		<b>\$</b> -	\$	-
		93.8	\$ 354,300	\$	446,480
ALEGENT HEALTH COMMUNITY MEMORIAL HOSPITAL	12	9.6		\$	59,140
GRAPE COMMUNITY HOSPITAL	12			\$	112,228
CLARINDA REGIONAL HEALTH CENTER SHENANDOAH MEDICAL CENTER	12 12	16.6 17.6		\$ \$	90,100 83,776
JENNIE EDMUNDSON HOSPITAL	12	19.8		\$	91,288
METHODIST HOSPITAL - OMAHA	12		\$ 100,000	\$	110,260
ALEGENT HEALTH-MERCY HOSPITAL - COUNCIL BLUFFS	12	3.8	. ,	\$	27,288
		83.4	\$ 468,700	\$	574,080
MARY GREELEY MEDICAL CENTER	14	18.1	\$ 72,500	\$	84,788
STORY COUNTY MEDICAL CENTER	14	57.7		\$	372,288
ST ANTHONY REGIONAL HOSPITAL	14	17.4		\$	90,140
BOONE COUNTY HOSPITAL	14	10.7		\$	62,900
		103.9	\$ 544,900	\$	610,116
MERCY MEDICAL CENTER - CEDAR RAPIDS	5	3.1	\$ 28,000	\$	48,000
VIRGINIA GAY HOSPITAL	5	13.4		\$	74,140
		16.5	\$ 81,500	\$	122,140
HAMILTON HOSPITAL	17	11.1	\$ 44,200	\$	64,200
GREENE COUNTY MEDICAL CENTER	17		\$ -	\$	28,800
STEWART MEMORIAL COMMUNITY HOSPITAL	17	4.9		\$	50,140
		15.9		\$	143,140
SKIFF MEDICAL CENTER	10	8.3		\$	45,928
PELLA REGIONAL HEALTH CENTER KNOXVILLE HOSPITAL & CLINICS	10 10	19.3 18.2		\$ \$	100,060 112,756
MADISON COUNTY HEALTH CARE SYSTEM	10	7.2		ъ \$	48,600
DALLAS COUNTY HOSPITAL	10	6.5		\$	70,864
MERCY MEDICAL CENTER-DES MOINES	10		\$ -	\$	9,656
MERCY MEDICAL CENTER-MERCY CAPITOL	10		<u> </u>	\$	9,656
		59.3	\$ 260,800	\$	397,520





		Days		Hospital		Edge
Hospital Name	MA			iber Cost	E	lectronics
HORN MEMORIAL HOSPITAL CHEROKEE REGIONAL MEDICAL CENTER	13 13	2.9 10.5		11,500 41,800	\$ \$	26,748 67.720
CRAWFORD COUNTY MEMORIAL HOSPITAL	13	21.6		86,400	Ф \$	108,720
BURGESS HEALTH CENTER	13	5.2		20,600	\$	42,448
MERCY MEDICAL CENTER-SIOUX CITY	13	6.0		24,000	\$	44,000
FLOYD VALLEY HOSPITAL	13	2.5		10,000	\$	30,000
		48.6		194,300	\$	319,636
MITCHELL COUNTY REGIONAL HEALTH CENTER	1	13.3	\$	53,000	\$	65,928
FLOYD COUNTY MEMORIAL HOSPITAL	1	19.5		78,100	\$	98,100
ELLSWORTH MUNICIPAL HOSPITAL	1	11.8		47,000	\$	67,000
FRANKLIN GENERAL HOSPITAL	1	21.7		102,000	\$	122,000
BELMOND MEDICAL CENTER	1	10.7		77,600	\$	97,600
HANCOCK COUNTY MEMORIAL HOSPITAL	1	8.5		34,000	\$	54,000
MERCY MEDICAL CENTER-NORTH IOWA	1	60.8 146.1		<b>243,000</b> 634,700	\$ \$	258,888 763,516
			_			
JEFFERSON COUNTY HOSPITAL	9	10.0		40,100	\$	52,388 63,648
VAN BUREN COUNTY HOSPITAL DAVIS COUNTY HOSPITAL	9 9	10.5 12.0		42,000 48,000	\$ \$	62,640 68,000
OTTUMWA REGIONAL HEALTH CENTER	9	12.0	\$		ъ \$	9,656
MERCY MEDICAL CENTER-CENTERVILLE	9	0.0		-	Ф \$	20,640
WAYNE COUNTY HOSPITAL	9	0.0		-	\$	22,960
LUCAS COUNTY HEALTH CENTER	9	11.7		46,900	\$	59,828
MONROE COUNTY HOSPITAL	9	13.1		69,500	\$	81,788
MAHASKA HEALTH PARTNERSHIP	9	4.5	\$	18,000	\$	38,000
		61.9	\$	264,500	\$	415,900
DECATUR COUNTY HOSPITAL	11	80.0	\$	552,450	\$	575,410
RINGGOLD COUNTY HOSPITAL	11	19.3		77,300	\$	90,228
ALEGENT HEALTH MERCY HOSPITAL - CORNING	11	7.4	\$	29,500	\$	41,788
MONTGOMERY COUNTY MEMORIAL HOSPITAL	11	11.7	\$	46,800	\$	67,440
AUDUBON COUNTY MEMORIAL HOSPITAL	11	13.1		64,100	\$	79,988
MANNING REGIONAL HEALTHCARE CENTER	11	13.8 145.2		<b>90,000</b> 860,150	\$ \$	107,096 961,950
		145.2	Ф	000,100	Ф	000,100
HUMBOLDT COUNTY MEMORIAL HOSPITAL	17	23.3		93,300	\$	113,300
BUENA VISTA REGIONAL MEDICAL CENTER	17	13.4		53,600	\$	77,200
LORING HOSPITAL	17		\$	-	\$	20,640
POCAHONTAS COMMUNITY HOSPITAL	17	10.6		42,300	\$	62,940
		47.3	5	189,200	\$	274,080
MERCY MEDICAL CENTER - DYERSVILLE	3	20.5	\$	117,000	\$	126,656
MERCY MEDICAL CENTER-DUBUQUE	3	0.0	\$	-	\$	20,000
REGIONAL MEDICAL CENTER	3	15.1	_	60,300	\$	80,940
		35.6	\$	177,300	\$	227,596
OSCEOLA COMMUNITY HOSPITAL	15	8.6		34,400	\$	54,400
ORANGE CITY AREA HEALTH SYSTEM	15	9.4		37,500	\$	57,500
BAUM-HARMON MERCY HOSPITAL	15	73.7		593,500	\$	603,760
HAWARDEN COMMUNITY HOSPITAL	15	5.5		32,000	\$	52,640
SIOUX CENTER COMMUNITY HOSPITAL & HEALTH CENTE MERRILL PIONEER COMMUNITY HOSPITAL	15	8.0 7.0		32,000 27,900	\$ \$	44,288 48,540
SANFORD SHELDON MEDICAL CENTER	15	12.4		49,700	Ф \$	59,356
HEGG MEMORIAL HEALTH CENTER	15	44.4		394,000	\$	406,288
THE OO MEMORINE HE HE HE TO ENTER	10			1,201,000	\$	1,326,772
REGIONAL HEALTH SERVICES OF HOWARD COUNTY	2	19.0	¢	76,000	\$	96,000
WINNESHIEK MEDICAL CENTER	2	9.8		73,500	\$	93,500
GUTTENBERG MUNICIPAL HOSPITAL	2	99.4		674,500	\$	691,752
CENTRAL COMMUNITY HOSPITAL	2	4.8	\$	19,000	\$	39,000
COMMUNITY MEMORIAL HOSPITAL	2	39.5		338,000	\$	350,928
MERCY MEDICAL CENTER-NEW HAMPTON	2	9.9		39,500	\$	59,500
VETERANS MEMORIAL HOSPITAL	2	14.3		<b>57,000</b> 1,277,500	\$ \$	77,000
		136.5	Ф	1,277,500	Ф	1,407,680
WAVERLY HEALTH CENTER	4	6.5		26,100	\$	46,740
BUCHANAN COUNTY HEALTH CENTER	4	16.7	_	66,900	\$	86,900
		23.3	Ъ	93,000	\$	133,640



Network Backbone Locations	<u>MA</u>	CWDM	MPLS BB
REGEN 204	1	\$ 4,887.20	\$ -
Mason City - Part 1	1	\$ 9,527.20	\$ 100,774.00
Oelwein - Part 2	2	\$ 12,407.20	\$ -
Elkader - Part 2	2	\$ 6,047.20	\$ -
Calmar - Part 1	2	\$ 12,127.20	\$ 61,780.00
Peosta - Part 1	3	\$ 3,447.20	\$ 100,150.00
REGEN 603	4	\$ 6,047.20	\$ -
Waterloo - Part 1	4	\$ 5,767.20	\$ 61,468.00
Cedar Rapids - Part 1	5	\$ 4,607.20	\$ 61,000.00
University of Iowa - Part 2	6	\$ 9,807.20	\$ -
SP 43	6	\$ 10,967.20	\$ 112,303.00
St. Ambrose - Part 3	7	\$ 6,047.20	\$ -
Bettendorf - Part 1	7	\$ 8,367.20	\$ 61,468.00
Burlington - Part 1	8	\$ 4,607.20	\$ 61,312.00
Fairfield - Part 2	9	\$ 6,047.20	\$ -
Chariton - Part 2	9	\$ 6,047.20	\$ -
Albia - Part 2	9	\$ 11,247.20	\$ -
Ottumwa - Part 1	9	\$ 15,887.20	\$ 113,083.00
REGEN 1106	10	\$ 6,047.20	\$
Winterset - Part 2	10	\$ 6,047.20	\$ -
JFHQ	10	\$ 10,967.20	\$ 112,459.00
Mount Ayr - Part 2	11	\$ 6,047.20	\$
REGEN 1120	11	\$ 11,247.20	\$ -
Audubon - Part 2	11	\$ 6,047.20	\$ -
Corning - Part 2	11	\$ 6,047.20	\$ -
Creston - Part 1	11	\$ 18,487.20	\$ 62,092.00
Sidney - Part 2	12	\$ 9,807.20	\$ -
Council Bluffs ING	12	\$ 6,047.20	\$ -
Council Bluffs - Part 1	12	\$ 14,727.20	\$ 100,618.00
lda Grove - Part 2	13	\$ 6,047.20	\$ -
REGEN 1204	13	\$ 9,807.20	\$ -
Sioux City - Part 1	13	\$ 10,967.20	\$ 100,618.00
Ames - Part 2	14	\$ 6,047.20	\$ -
SP125	14	\$ 7,207.20	\$ 151,453.00
Sioux Center - Part 2	<u>15</u>	\$ 8,647.20	\$ -
Sheldon - Part 1	15	\$ 10,967.20	\$ 61,936.00
Estherville - Part 1	16	\$ 4,607.20	\$ 61,468.00
Rockwell City - Part 2	17	\$ 8,647.20	\$ -
REGEN 1131	<u>17</u>	\$ 3,447.20	\$ -
Fort Dodge - Part 1	17	\$ 12,127.20	\$ 100,618.00
SP23			\$ 104,482.00
Des Moines - Lucas	<u>10</u>		\$ 61,000.00
Network Mgmnt			\$ 237,500.00

# 3. Milestones/Timelines

ID	Task Name	Duration	Start	Finish	Predecessors
1	Rural Healthcare Project	500 days	8/1/07	6/30/09	
2	Final Design Review	16 days	8/1/07	8/22/07	
3	IHA Task Force reviews Final Design	15 days	8/1/07	8/21/07	
4	IHA Legal Officer reviews Final Design	15 days	8/1/07	8/21/07	
5	IHA accepts final design review	1 day	8/22/07	8/22/07	4
6	Procurement Phase	484 days	8/22/07	6/29/09	4
7	Outside Plant Projects	69 days	8/23/07	11/27/07	5
8	Publish Outside Plant Specifications - Year One Projects	24 days	8/23/07	9/25/07	5
9	Merged Area One	24 days	8/23/07	9/25/07	5
10	Merged Area Two	24 days	8/23/07	9/25/07	
11	Merged Area Three	24 days	8/23/07	9/25/07	
12	Merged Area Four	24 days	8/23/07	9/25/07	
13	Merged Area Five	24 days	8/23/07	9/25/07	
14	Merged Area Nine	24 days	8/23/07	9/25/07	
15	Merged Area Eleven	24 days	8/23/07	9/25/07	
16	Publish Core Electronics (CE) Bid Specifications	24 days	8/23/07	9/25/07	
17	Publish Edge Electronics (EE) Bid Specifications	24 days	8/23/07	9/25/07	
18	Publish CWDM Electronics Bid Specifications	24 days	8/23/07	9/25/07	
19	Publish NMP Electronics Bid Specifications	24 days	8/23/07	9/25/07	
20	Publish Outside Plant Bid Specifications - Year Two Projects	24 days	8/23/07	9/25/07	4
21	Merged Area Six	24 days	8/23/07	9/25/07	
22	Merged Area Seven	24 days	8/23/07	9/25/07	
23	Merged Area Eight	24 days	8/23/07	9/25/07	
24	Merged Area Ten	24 days	8/23/07	9/25/07	
25	Merged Area Twelve	24 days	8/23/07	9/25/07	
26	Merged Area Thirteen	24 days	8/23/07	9/25/07	
27	Merged Area Fourteen	24 days	8/23/07	9/25/07	
28	Merged Area Fifteen	24 days	8/23/07	9/25/07	
29	Merged Area Sixteen	24 days	8/23/07	9/25/07	
30	Merged Area Seventeen	24 days	8/23/07	9/25/07	
31	Release OSP Bid Documents to Vendors	4 days	8/30/07	9/4/07	



32	Mandatory OSP Vendors Conference	1 day	9/7/07	9/7/07	
33	Release RFP Addenda	5 days	9/10/07	9/14/07	32
34	OSP Bids Due	1 day	10/16/07	10/16/07	
35	Bid Evaluation	30 days	10/17/07	11/27/07	34
36	Bid Award	1 day	11/28/07	11/28/07	35
		174			
37	Installation Phase - Year One	days	10/31/07	6/30/08	
38	Merged Area One - 7 Sites	174 days	10/31/07	6/30/08	36
39	Merged Area Two - 9 Sites	174 days	10/31/07	6/30/08	36
40	Merged Area Three - 4 Sites	174 days	10/31/07	6/30/08	36
41	Merged Area Four - 4 Sites	174 days	10/31/07	6/30/08	36
42	Merged Area Five - 4 Sites	174 days	10/31/07	6/30/08	36
43	Merged Area Nine - 8 Sites	174 days	10/31/07	6/30/08	36
44	Merged Area Eleven - 10 Sites	174 days	10/31/07	6/30/08	36
		425			
45	Installation Phase – Year Two	days	10/31/07	6/16/09	
46	Merged Area Six - 8 Sites	425 days	10/31/07	6/16/09	36
47	Merged Area Seven - 4 Sites	425 days	10/31/07	6/16/09	36
48	Merged Area Eight - 10 Sites	425 days	10/31/07	6/16/09	36
49	Merged Area Ten - 10 Sites	425 days	10/31/07	6/16/09	36
50	Merged Area Twelve - 8 Sites	425 days	10/31/07	6/16/09	36
51	Merged Area Thirteen - 7 Sites	425 days	10/31/07	6/16/09	36
52	Merged Area Fourteen - 4 Sites	425 days	10/31/07	6/16/09	36
53	Merged Area Fifteen - 8 Sites	425 days	10/31/07	6/16/09	36
54	Merged Area Sixteen - 5 Sites	425 days	10/31/07	6/16/09	36
55	Merged Area Seventeen - 9 Sites	425 days	10/31/07	6/16/09	36
56	Network Electronics and Turn Up	93 days	9/25/07	1/31/08	
57	Network Electronics RFP issued	1 day	9/25/07	9/25/07	
58	Network Electronics Bidders Conference	1 day	9/28/07	9/28/07	
59	Network Electronics RFP Responses due	1 day	11/6/07	11/6/07	
60	Network Electronics RFP Evaluation	30 days	11/7/07	12/18/07	59
61	Network Electronics Test Lab evaluation	30 days	12/19/07	1/29/08	60
62	Award Network Electronics Contract	1 day	1/30/08	1/30/08	61
63	Order Network Electronics	1 day	1/31/08	1/31/08	62

### Iowa Rural Health Telecommunications Program Order WC Docket 02-60



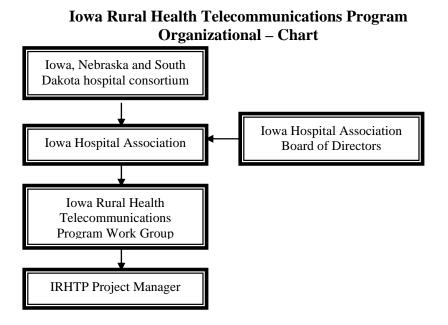
		368			
64	Link and Segment Test and Acceptance	days	1/30/08	6/26/09	
65	Formulate Test and Acceptance Criteria	1 day	1/30/08	1/30/08	61
66	Release T & A Criteria to successful network electronics vendor	1 day	1/30/08	1/30/08	61
67	Year One Test and Acceptance by link and segment	109 days	1/30/08	6/30/08	61
68	Year Two Test and Acceptance by link and segment	368 days	1/30/08	6/26/09	61
		434			
69	Project Close Out	days	10/31/07	6/29/09	
70	Network Management trials and alarm verification	368 days	1/30/08	6/26/09	61
71	Accept Network Management Platform	30 days	1/30/08	3/11/08	61
72	Gather and catalog all documentation	433 days	10/31/07	6/26/09	36
	Prepare final design Visio diagrams and network element				
73	descriptions	433 days	10/31/07	6/26/09	36
74	Final Project Briefing	1 day	6/29/09	6/29/09	73
75	Closeout	1 day	6/30/09	6/30/09	74



## CRITERIA SECTION (10) PROGRAM COORDINATION

The Iowa Rural Health Telecommunications Program is comprised of four (4) organizational components having distinct responsibilities for each body. See the diagram below for the reporting structure of the Iowa Rural Health Telecommunications Program.

- Project Manager for fiber construction will guide the construction of the proposed fiber broadband network. This manager will be responsible to deliver of the project within the scope defined. The management role will also be responsible for the budget, time table for the project to be completed and the delivery of the project.
   This project manager will report to the directed workgroup at the Iowa Hospital Association, who in turn will report to the consortium of Iowa hospitals listed in this application. This position will be hired upon the award of funding.
- 2. The Iowa Rural Telecommunications Network workgroup will be responsible for the project administration and approval of work phase progression and financial remittance. Chair, appointed following funding award, will be responsible for these approvals. This workgroup will be comprised of representatives from the Iowa hospitals in the consortium leadership from the Iowa Hospital Association and state resource groups' representative(s).
- 3. The Iowa Hospital Association will be responsible for oversight and communication from Iowa consortium hospitals participating in this application and the project management representative(s). Iowa Hospital Association will provide administrative support to the Iowa Hospital Association Board appointed workgroup and provide general administrative and fund accounting for the project.
- 4. The Iowa Hospital Consortium is made up of the one hundred (100) Iowa, Nebraska and South Dakota hospitals listed in this application.





## CRITERIA SECTION (11) NETWORK SELF-SUSTAINMENT

1. **Network Maintenance:** The ongoing maintenance of the IRHTP network will be managed by the ICN. Since 1993 the ICN has maintained over 3000 miles of fiber and the network electronics to sustain over 800 network nodes.

The IRHTP is collaborating with the ICN for this project because of the following benefits it currently brings to the state:

- a. The ICN has over ten (10) years of fiber optic network administration, design, engineering and maintenance experience.
- b. The IRHTP can utilize the currently installed statewide fiber backbone, wavelengths, aggregation facilities, and points of presence to provide a cost effective broadband service.
- c. Once installed, documented, and accepted the ICN is responsible for maintaining and managing all transport systems into perpetuity.
- d. Once installed, documented and accepted the ICN is responsible for all fiber locates, relocates, and maintenance.
- e. The ICN provides a lower uniform fee structure regardless of urban or rural status, location or distance. Connection and usage fees will be based on bandwidth used by each hospital. The fees paid to the ICN will sustain the program.
- f. There is a history of state funding to support administration and maintenance of the fiber network.
- g. The ICN backbone is "in ground" versus strung on poles.
- h. The ICN has resilient gigabit connections providing Internet and Internet2 service to its authorized users.
- i. Iowa Homeland Security and Emergency Management already uses the ICN for video conferencing and data services.
- j. Currently, all Iowans are within fifteen (15) minutes of an ICN site. The ICN, an existing statewide broadband network, provides three (3) to four (4) points of presence in all ninety-nine (99) Iowa counties.
- 2.Network Financial Sustainability: The cost of maintaining the new last mile fiber connections, network electronics, co-location fees and wavelength service fees will be covered by standardized monthly connection and bandwidth fees. Monthly fees could be offset by the consolidation of network services, centralization of data networking resources or new healthcare services enabled by a cost effective high bandwidth network.
- 3. Future Iowa Hospital Value: Each facility included in this proposal was asked to consider their current uses of telemedicine and telecommunications and also weighed the benefits of future applications.
  - a. **Out-of-State Participation:** The IRHTP anticipates that there will be a need for future on-going network services across Iowa's state lines. The IRHTP will continue to seek options for this connectivity, in regards to financial and logistical (fiber construction) assistance.
  - b. **Non-participating organizations:** The IRHTP anticipates that the remaining hospitals (twenty) in Iowa and for-profit entities in the region may inquire about connecting to the network in the future. The IRHTP will continue efforts to



collaborate with these groups. However, it is understood that FCC funding for this pilot program year will be limited to the hospital organizations listed in this application. Future partnerships will be established through other funding sources or future FCC cycle application(s).

#### **WAIVERS**

#### 1. Non- Eligible Applicant and Disbursement of Funds Waiver

- a. The Iowa Rural Health Telecommunications Program (IRHTP) requests that the Iowa Hospital Association (IHA) represent the one hundred (100) hospitals in this application. One application is being submitted to the Federal Communications Commission (FCC) for this consortium of hospitals. The IHA will provide overall direction for this program on behalf of the participating hospitals.
- b. Because the IRHTP does not have any administrative or fiscal capability, the IRHTP requests a waiver for a non-eligible applicant, IHA, to administer and approve disbursement of all FCC Pilot Program funds awarded to IRHTP. IHA understands it is a non-eligible applicant as part of the consortium and will not directly receive or use any FCC pilot program funds. IHA will administer this network project on behalf of the IRHTP including managing timelines, the bid process, budgets, contractors and disbursement approvals for the good of the consortium members and the FCC. All administrative costs will be the responsibility of IHA and its consortium members.

## 2. Construction Payment and Installation Payment Method Waiver

- a. The Iowa Rural Health Telecommunications Program (IRHTP) requests a waiver for construction payments to extend beyond the 2006 and 2007 fiscal years (USAC fiscal year July 1, 2006 to June 30, 2007). It is IRHTP understanding that funding for the FCC Pilot Program will be appropriated from FY 2006 and FY 2007. Construction and implementation for IRHTP request will not be reimbursable until April 2008 with a project completion scheduled for July 2009. Construction retainage may also require disbursement of funds outside of a given fiscal year. This waiver requests the funds listed in this application be disbursed beyond the 2006 and 2007 fiscal years.
- b. Due to the size of IRHTP network and the potential for significant construction costs, IRHTP requests a waiver to allow progress billing. The Iowa Hospital Association will manage all contractors and progress billing requests. IHA will process, approve, and forward all progress billing requests to the appropriate USAC/FCC department which in turn will remit payments directly to each contractor. Payment requests will be according to natural breaks in construction timelines, regional completion and or completion of merged areas.

#### 3. Federal Communications Commission

a. The IRHTP requests a waiver from the Federal Communications Commission (FCC) individual hospital competitive bidding process. The IRHTP requests the ability to bid multiple hospitals, regions of Iowa, or the entire state of Iowa including fiber construction and all network electronics. IRHTP believes this approach will meet the FCC's competitive bidding requirements and yield a cohesive, integrated network.

#### 4. Hospital Opt-out Waiver



a. The Iowa Rural Health Telecommunications Program requests a waiver for all the entities listed in the application. The Iowa hospitals understand the cost of this program based on the Federal Communications Commission estimates of eighty-five percent (85%) reimbursement of construction costs. If the funding reimbursement does not reach eighty-five percent (85%) or actual construction costs exceed estimated costs, the program hospitals request an option to remove their respective hospital from this application.

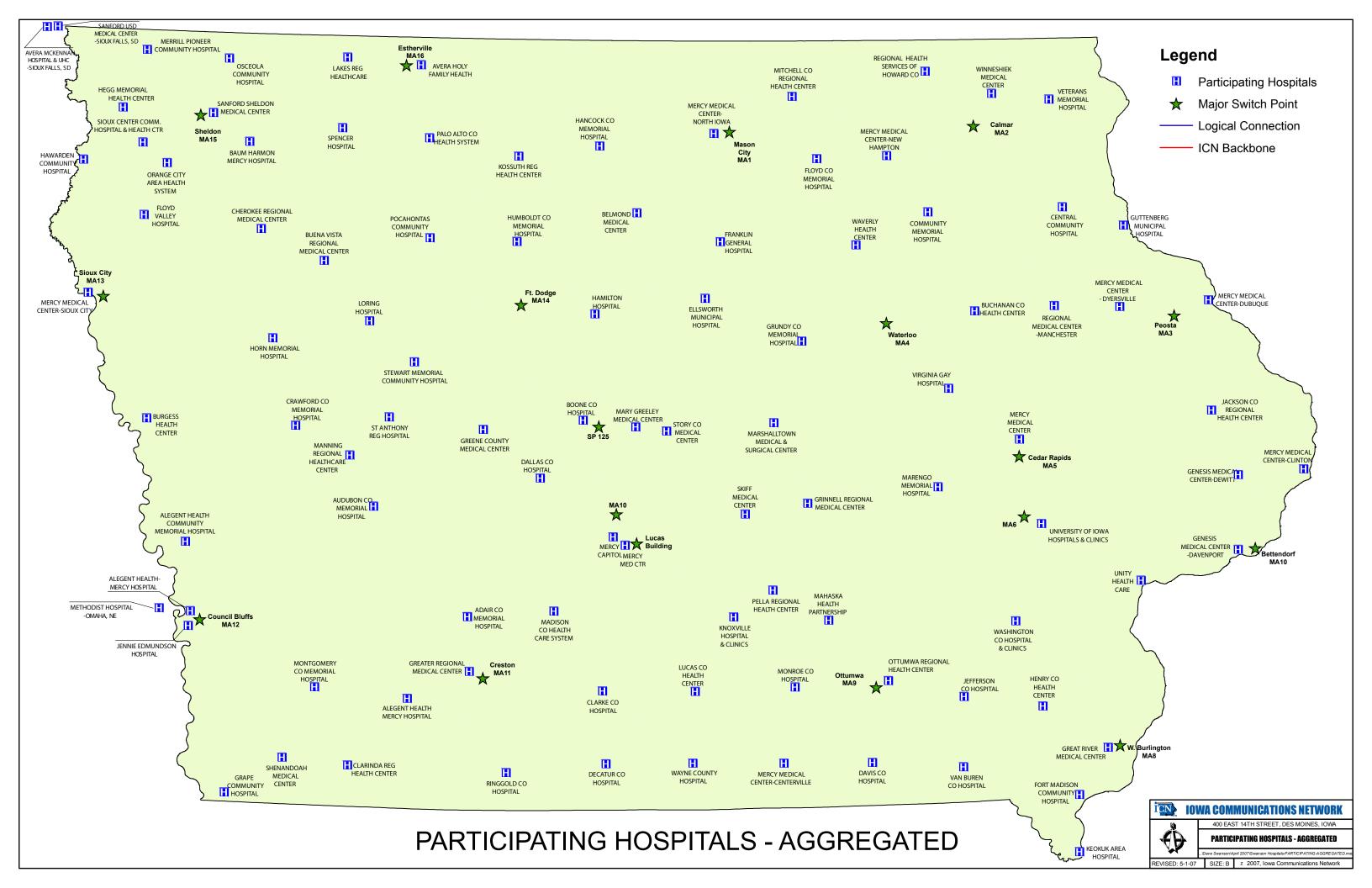
## **APPENDIXES**

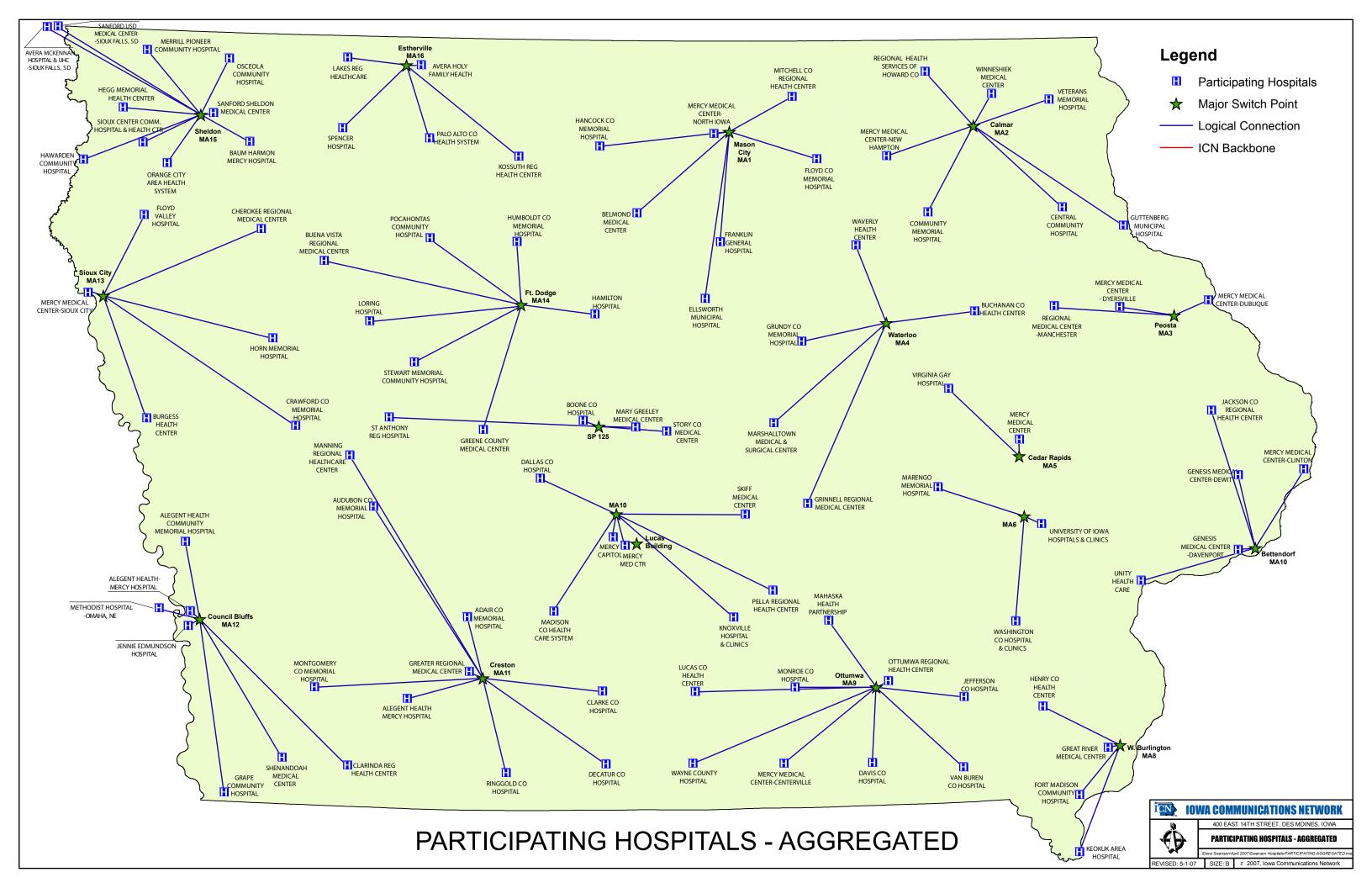
- A. Network Maps
  - 1) Participating Hospitals
  - 2) Merged Areas
  - 3) 10 Gigabit MPLS Backbone
- B. Detailed Project Plan –
- C. Individual Hospital Materials List
- D. Health Alert Network Detail

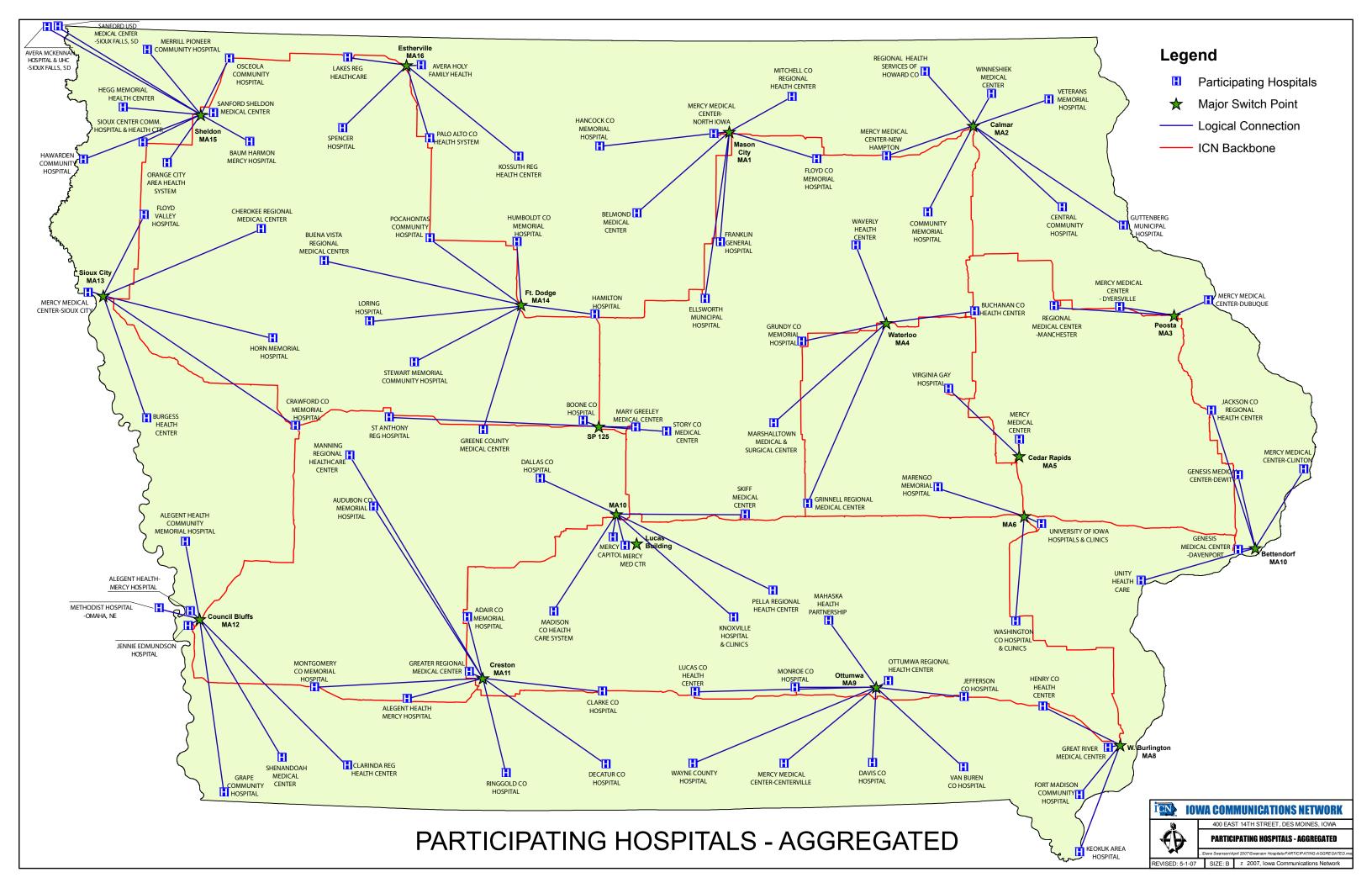
## LETTERS OF SUPPORT

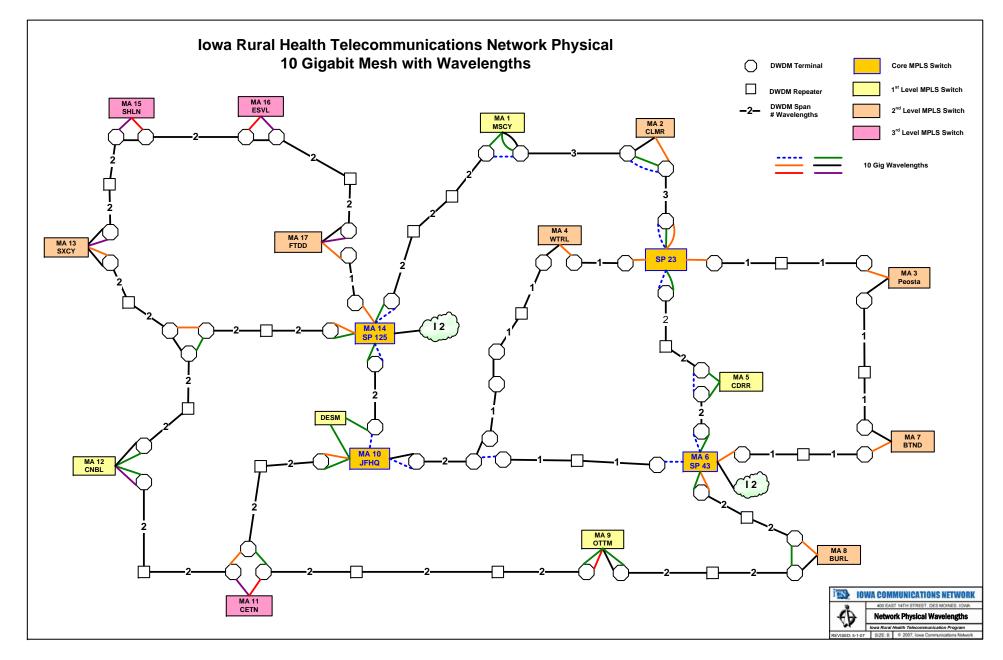
- A. Congressional Letters
- **B.** Iowa Governor
- C. Iowa Homeland Security
- D. Iowa Hospital Association
- E. Iowa Academy of Family Physicians (IAAFP)
- F. Iowa Osteopathic Medical Association (IOMA)
- G. Iowa Foundation for Medical Care (Iowa Quality Improvement Organization)
- H. Wellmark Blue Cross and Blue Shield
- I. Midwest Rural Telemedicine Consortium
- J. Avera Health
- K. Sanford Health
- L. Mercy College of Health Sciences
- M. Univ. of Iowa Hospital and Clinics

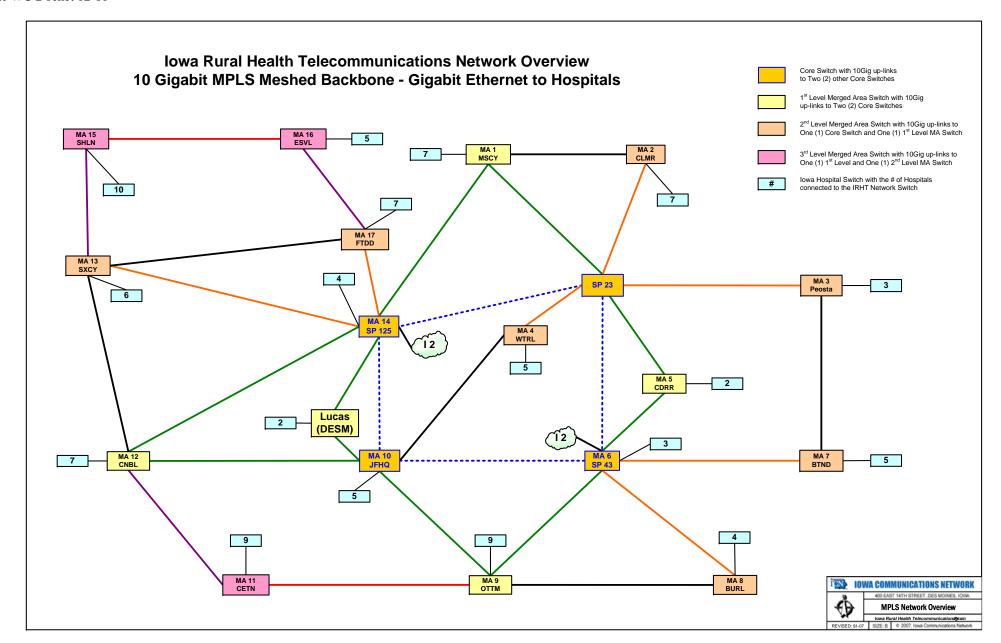
# APPENDIX A

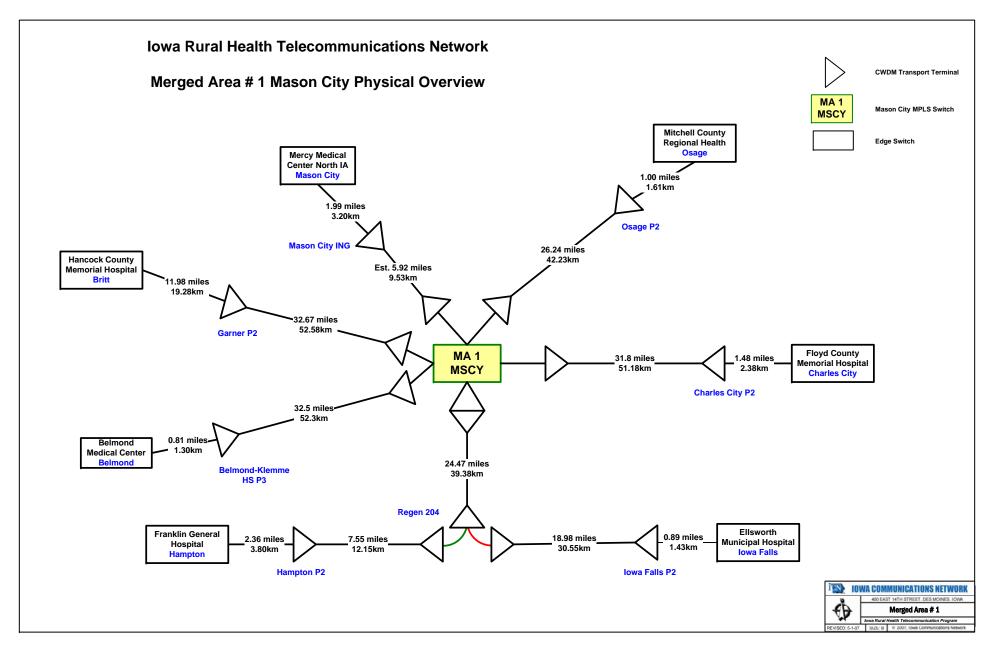


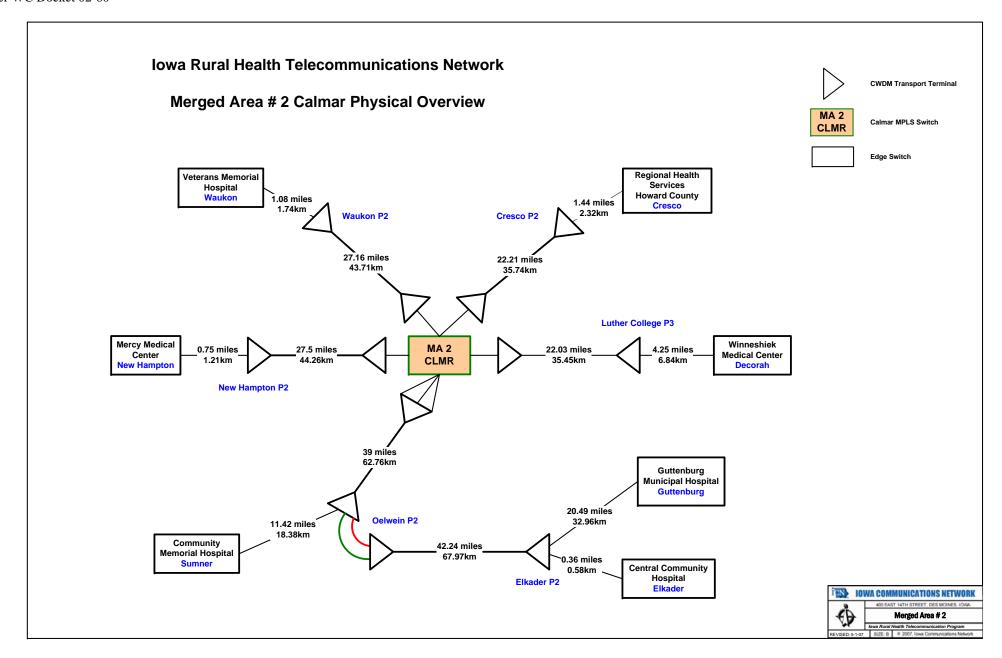


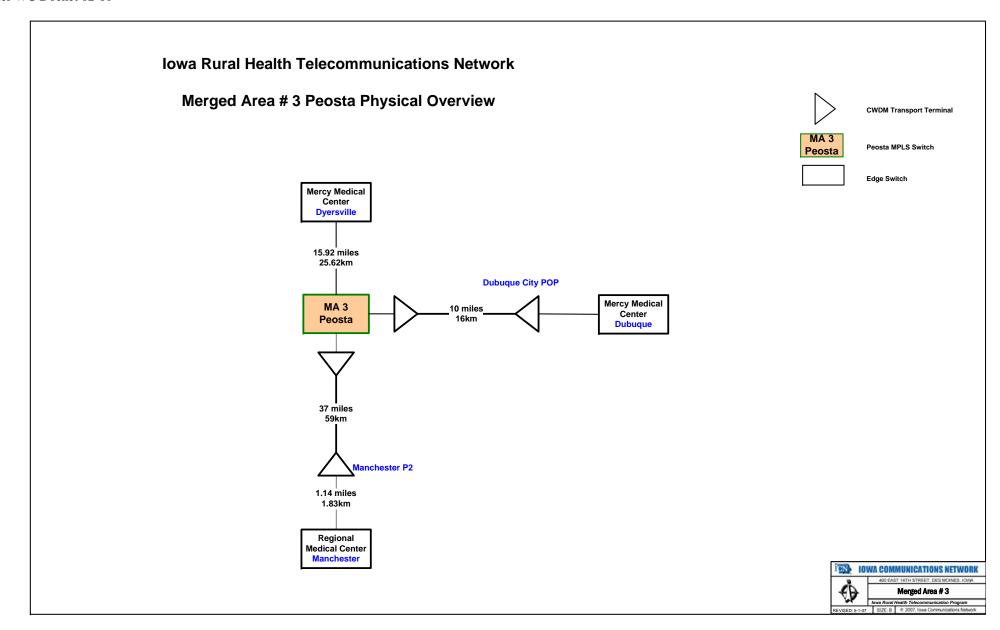


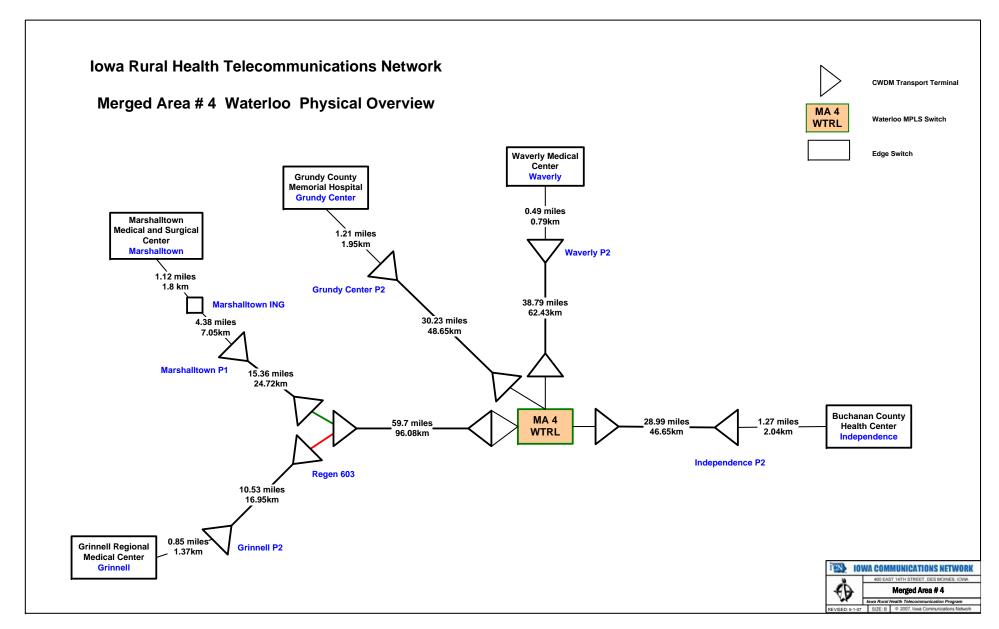


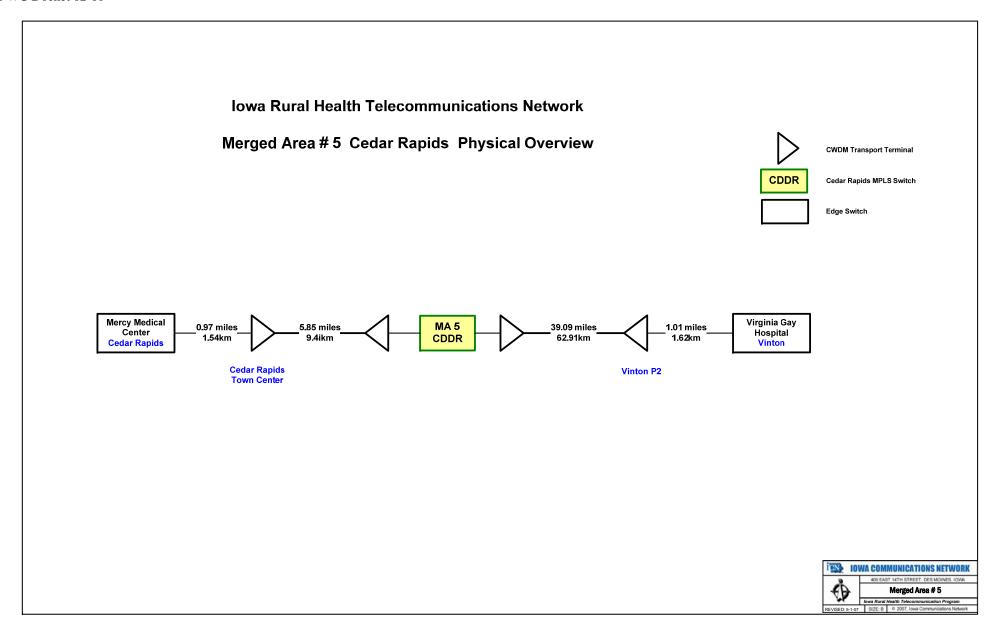


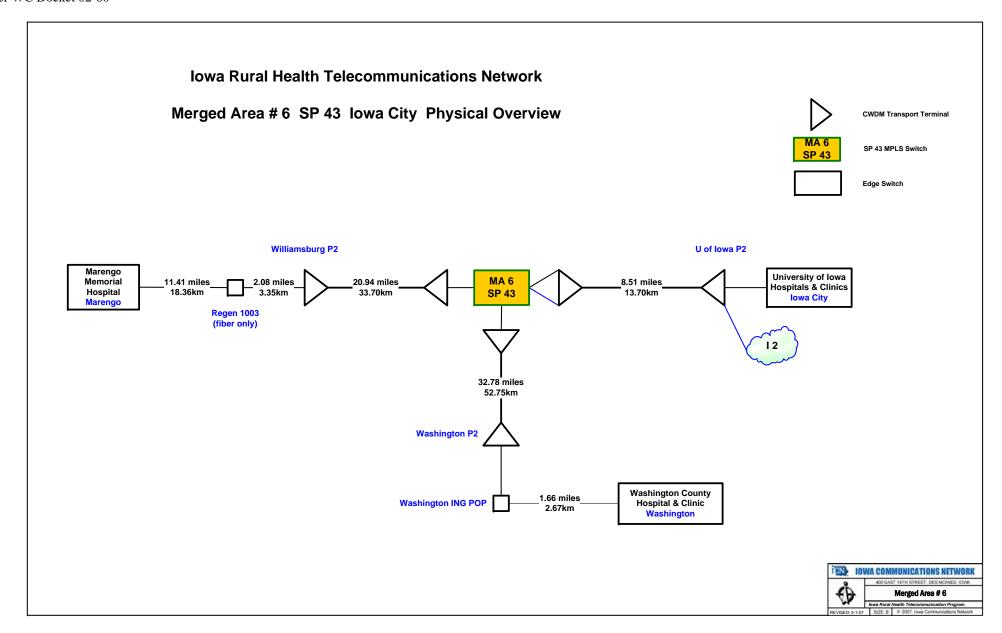


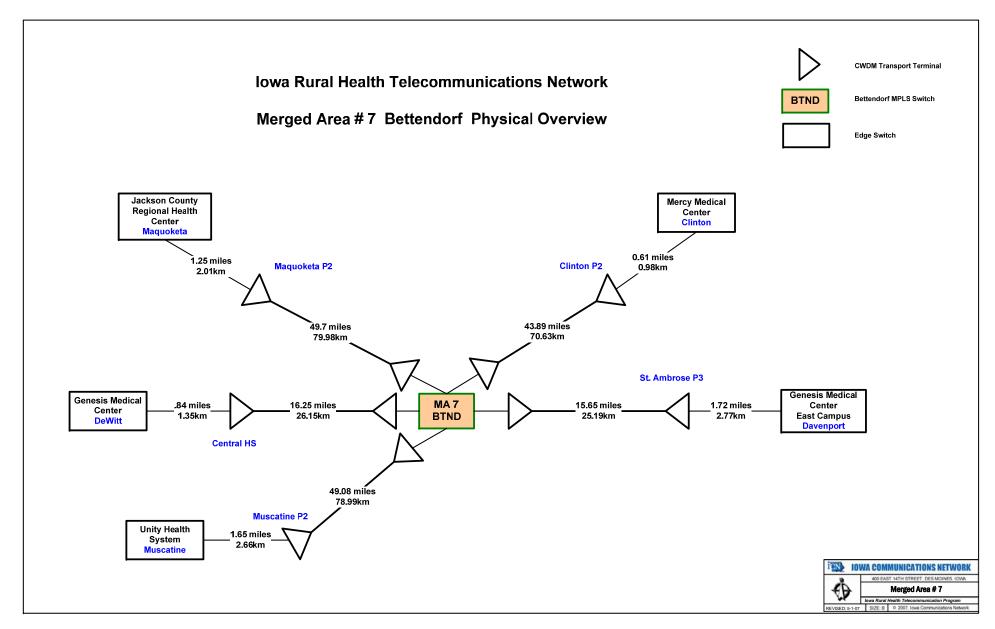


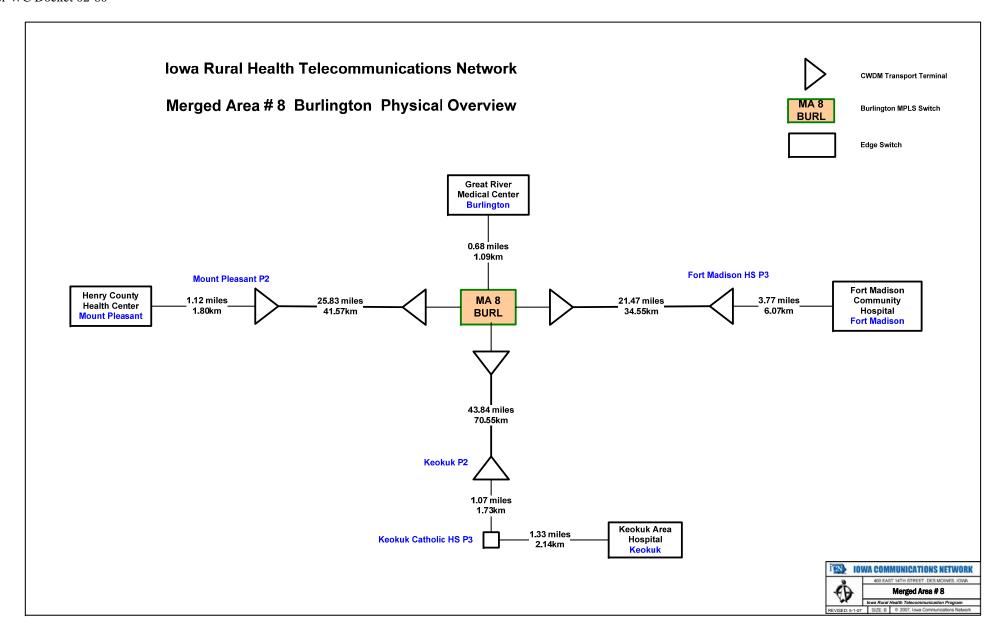


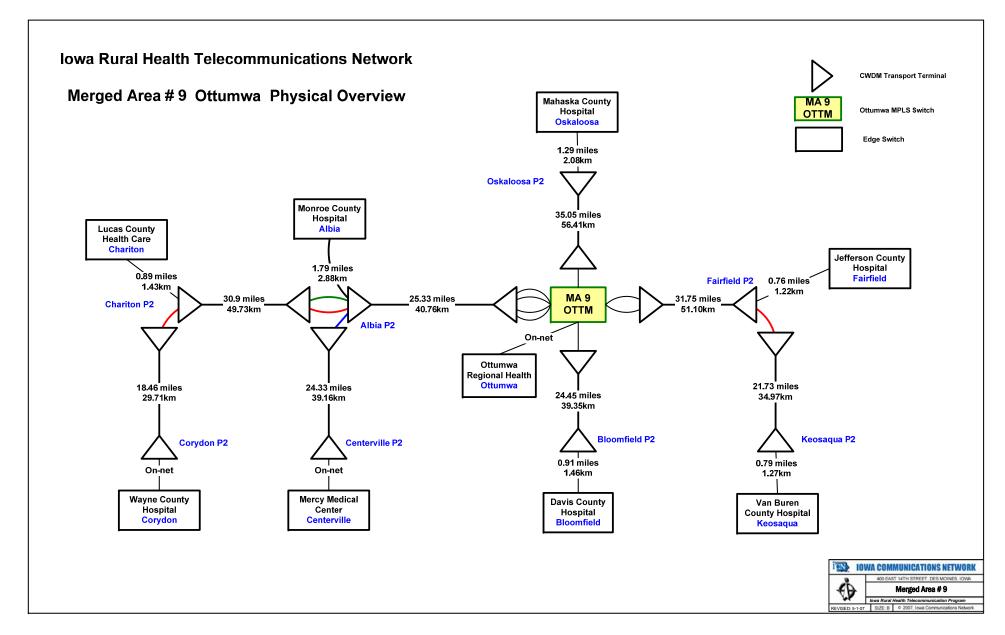


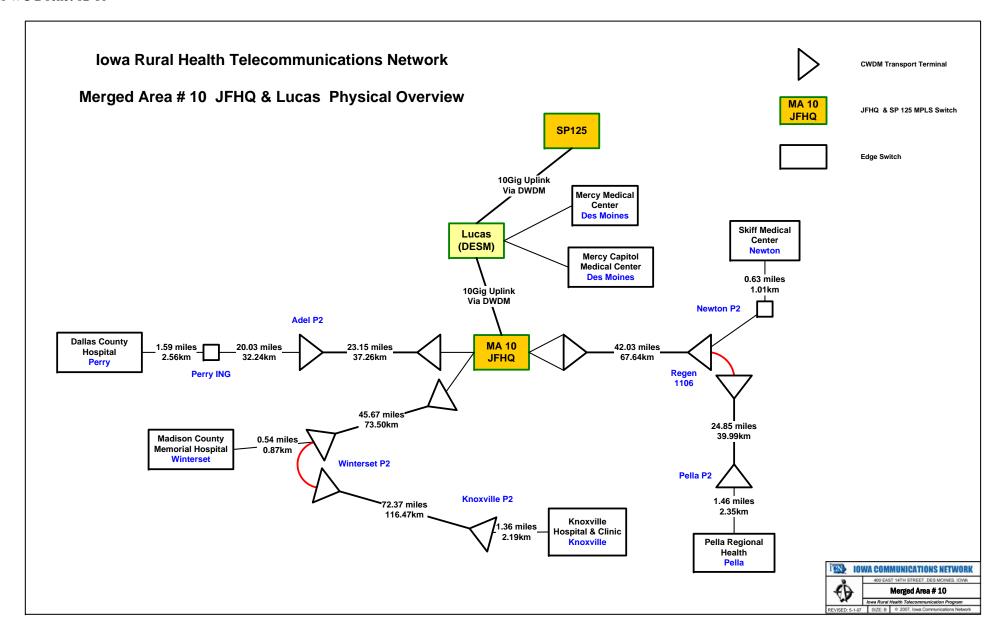


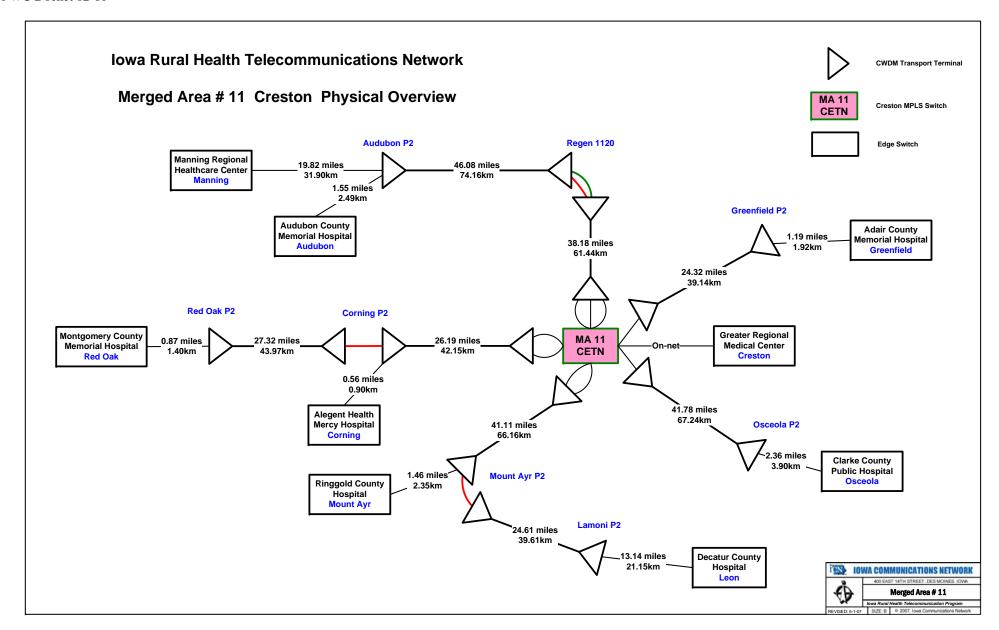


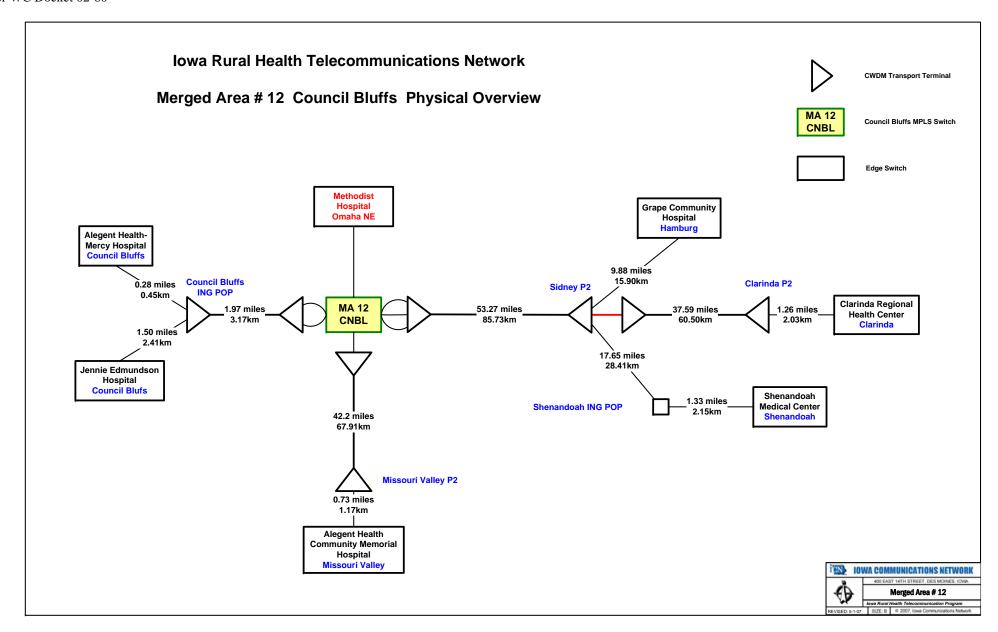


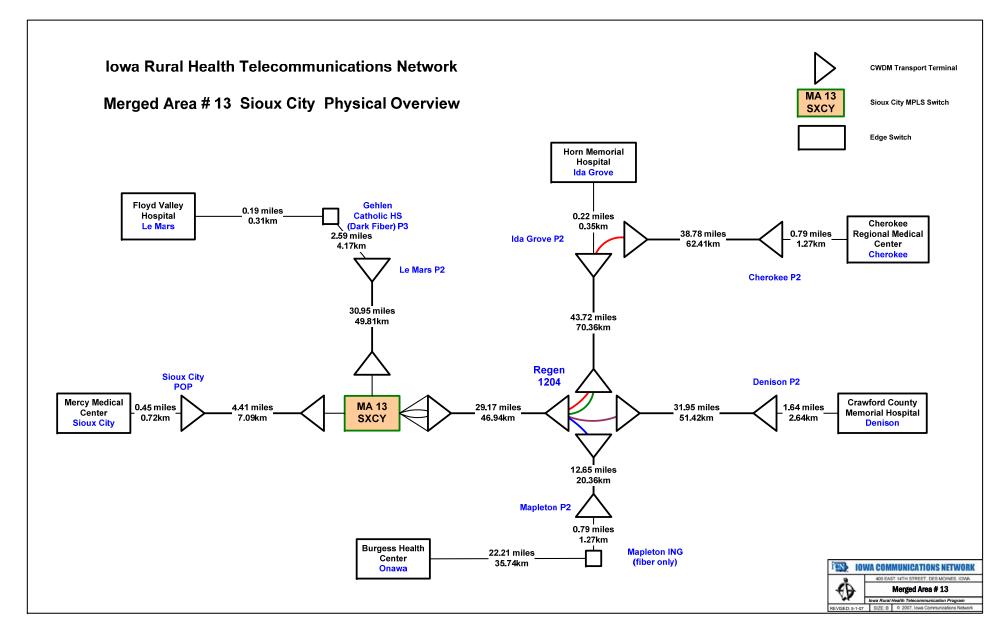


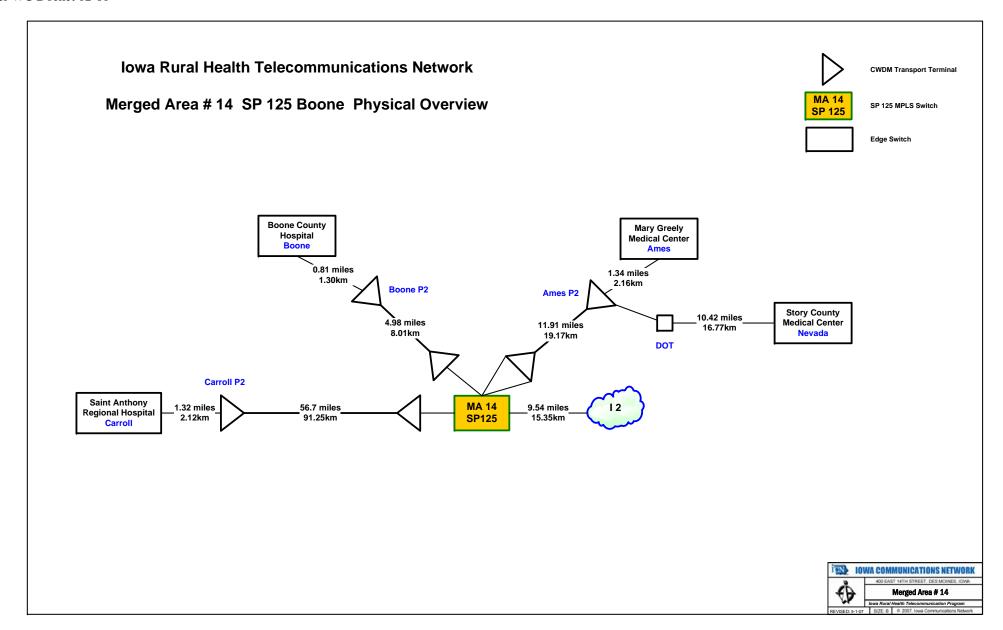


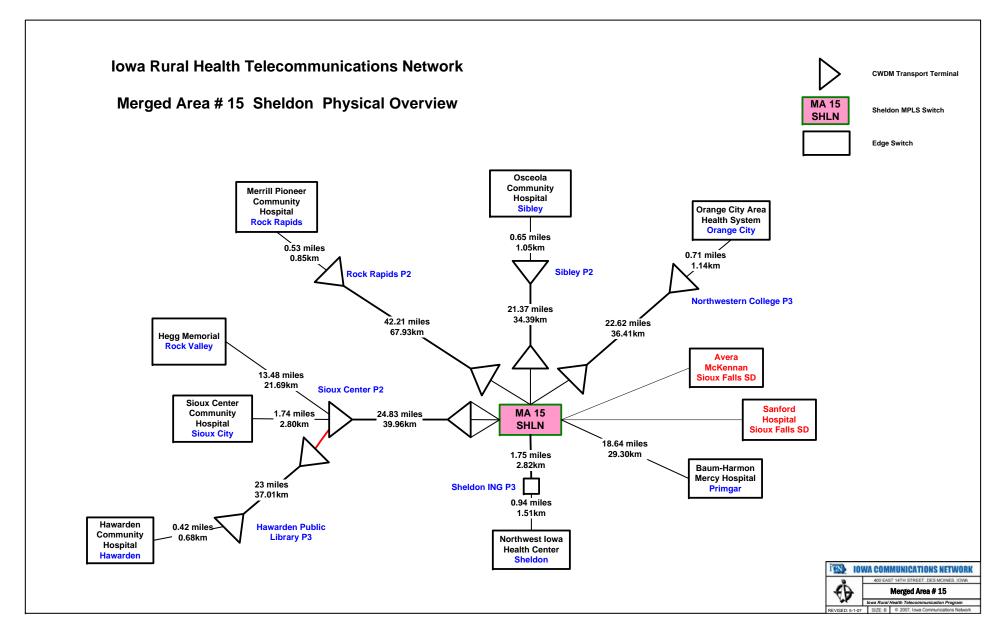


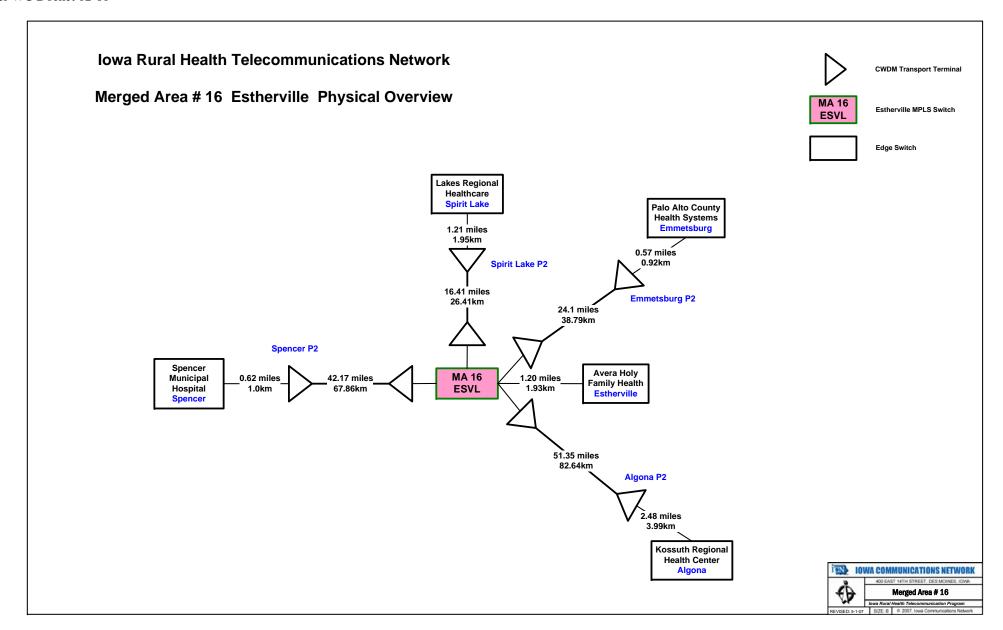


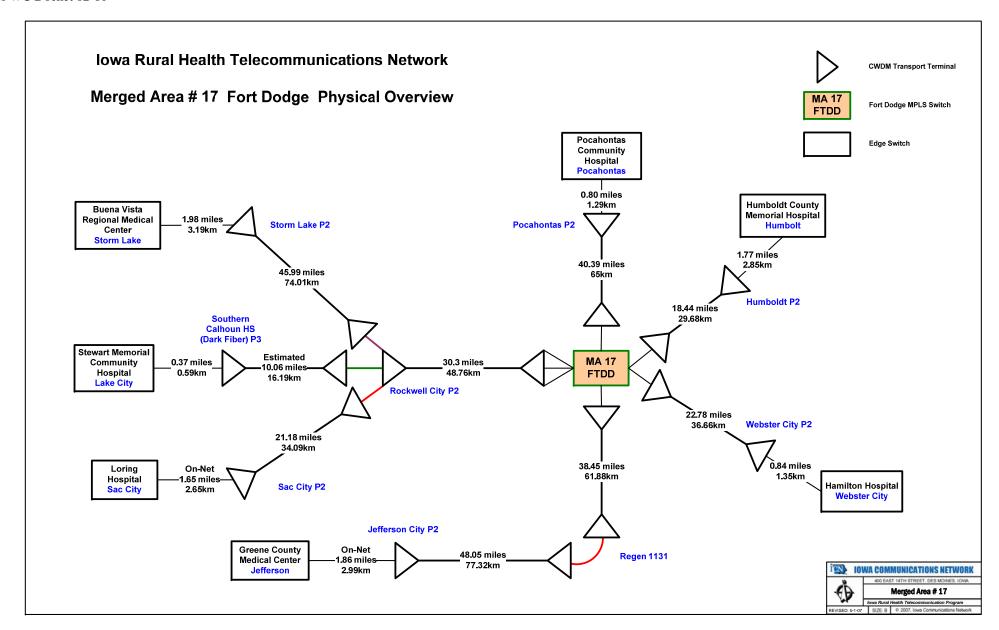












# APPENDIX B

	Sample Detailed 1	Timeline for	Merged Are	na 1	
ID	Task Name	Duration	Start	Finish	Predecessors
1	Merged Area One - 7 Sites	153 days	11/28/07	6/27/08	1 10000033013
2	Merged Area 1 Construction Project	153 days	11/28/07	6/27/08	
3	Award OSP contract to vendor	1 daγ	11/28/07	11/28/07	
4	OSP Construction Tasks	222 days	11/29/07	6/26/08	3
5	Establish Contracts with sub contractors	5 days	11/29/07	12/5/07	
6	Sub Contractors mobilize	5 days	11/29/07	12/5/07	ŭ
7	Secure Public Private Construction Partnerships	5	11/29/07	2/20/08	3
8	Secure ROW Permits	61 days	11/29/07	2/21/08	ŭ
9	Mitchell County Regional	13 days	11/29/07	12/17/07	3
10	Floyd County Hospital	20 days	11/29/07	12/26/07	3
11	Ellsworth Medical Center	12 days	11/29/07	12/14/07	3
12	Franklin General Hospital	22 days	11/29/07	12/28/07 7	3
13	Belmond Medial Center	11 daγs	11/29/07	12/13/07 💆	3
14	Hancock Memorial Hospital	9 days	11/29/07	12/11/07	
15	Mercy Medical Center - MCY	61 days	11/29/07	2/21/08	3
16	Boring and Inner Duct Placement	62 daγs	3/11/08	5/21/08	
17	Mitchell County Regional	3 days	3/18/08	3/20/08	
18	Floyd County Hospital	5 days	3/18/08	3/24/08	
19	Ellsworth Medical Center	3 days	3/18/08	3/20/08	
20	Franklin General Hospital	6 days	3/11/08	3/20/08	
21	Belmond Medial Center	3 days	3/18/08	3/20/08	
22	Hancock Memorial Hospital	6 days	3/18/08	3/25/08	
23	Mercy Medical Center - MCY	10 days	3/18/08	5/21/08	
24	Fiber Placement and Termination	104 days	3/21/08	6/4/08	
25	Mitchell County Regional	8 days	3/21/08	4/1/08 💆	17
26	Floyd County Hospital	13 days	3/25/08	4/10/08 💆	18
27	Ellsworth Medical Center	7 days	3/21/08	3/31/08 [	19
28	Franklin General Hospital	13 days	3/21/08	4/8/08 [	20
29	Belmond Medial Center	6 days	3/21/08	3/28/08	21
30	Hancock Memorial Hospital	6 days	3/26/08	4/2/08	22
31	Mercy Medical Center - MCY	47 days	5/22/08	6/4/08 💆	23

	Sample Detailed	Timeline for	Merged Are	a 1	
ID	Task Name	Duration	Start	Finish	Predecessors
32	Site Restoration and OSP Closeout	101 days	3/31/08	6/9/08	
33	Mitchell County Regional	2 days	4/2/08	4/3/08	25
34	Floyd County Hospital	2 days	4/11/08	4/14/08	26
35	Ellsworth Medical Center	2 days	4/1/08	4/2/08 <b>"</b>	27
36	Franklin General Hospital	2 days	4/9/08	4/10/08	
37	Belmond Medial Center	2 days	3/31/08	4/1/08	29
38	Hancock Memorial Hospital	2 days	4/3/08	4/4/08	30
39	Mercy Medical Center - MCY	3 days	6/5/08	6/9/08 <b>*</b>	31
40	Network Electronics Installation	99 days	3/31/08	6/5/08	
41	Mitchell County Regional	1 day	4/2/08	4/2/08 <b>"</b>	25
42	Floyd County Hospital	1 day	4/11/08	4/11/08 <b>"</b>	26
43	Ellsworth Medical Center	1 day	4/1/08	4/1 <i>/</i> 08 <b>"</b>	27
44	Franklin General Hospital	1 day	4/9/08	4/9/08 7	28
45	Belmond Medial Center	1 day	3/31/08	3/31/08	29
46	Hancock Memorial Hospital	1 day	4/3/08	4/3/08 <b>"</b>	30
47	Mercy Medical Center - MCY	1 day	6/5/08	6/5/08 <b>"</b>	31
48	Network Management Installation testing	99 days	4/1/08	6/6/08	
49	Mitchell County Regional	1 day	4/3/08	4/3/08 <b>"</b>	41
50	Floyd County Hospital	1 day	4/14/08	4/14/08 <b>"</b>	42
51	Ellsworth Medical Center	1 day	4/2/08	4/2/08 <b>"</b>	
52	Franklin General Hospital	1 day	4/10/08	4/10/08 💆	
53	Belmond Medial Center	1 day	4/1/08	4/1/08	
54	Hancock Memorial Hospital	1 day	4/4/08	4/4/08 7	
55	Mercy Medical Center - MCY	1 day	6/6/08	6/6/08	47
56	Turn-Up and Test and Acceptance	99 days	4/2/08	6/9/08	
57	Mitchell County Regional	1 day	4/4/08	4/4/08	
58	Floyd County Hospital	1 day	4/15/08	4/15/08	
59	Ellsworth Medical Center	1 day	4/3/08	4/3/08	
60	Franklin General Hospital	1 day	4/11/08	4/11/08	
61	Belmond Medial Center	1 day	4/2/08	4/2/08	
62	Hancock Memorial Hospital	1 day	4/7/08	4/7/08	
63	Mercy Medical Center - MCY	1 day	6/9/08	6/9/08	
64	Network Trials and Alarm Verification	1 day	6/10/08	6/10/08	
65	Prepare final network element documentation	160 days	2/22/08	6/26/08	_
66	Merged Area 1 close out.	1 day	6/27/08	6/27/08 <b>*</b>	65

# APPENDIX C

Hospital Name	<u>MA</u>
Mercy Health Network	
HAWARDEN COMMUNITY HOSPITAL	15
DECATUR COUNTY HOSPITAL	11
MANNING REGIONAL HEALTHCARE CENTER	11
BAUM-HARMON MERCY HOSPITAL	15
BELMOND MEDICAL CENTER	1 1
MERCY MEDICAL CENTER - DYERSVILLE	3
STORY COUNTY MEDICAL CENTER	14
HANCOCK COUNTY MEMORIAL HOSPITAL	1
KOSSUTH REGIONAL HEALTH CENTER	16
FRANKLIN GENERAL HOSPITAL	] 1
RINGGOLD COUNTY HOSPITAL	11
REGIONAL HEALTH SERVICES OF HOWARD COUNTY	2
MONROE COUNTY HOSPITAL	8
CLARINDA REGIONAL HEALTH CENTER	12
AUDUBON COUNTY MEMORIAL HOSPITAL	11
ADAIR COUNTY MEMORIAL HOSPITAL	11
MERCY MEDICAL CENTER-DUBUQUE	3
DAVIS COUNTY HOSPITAL	8
HAMILTON HOSPITAL	17
MERCY MEDICAL CENTER-NEW HAMPTON	2
MADISON COUNTY MEMORIAL HOSPITAL	10
MITCHELL COUNTY REGIONAL HEALTH CENTER	1
ELLSWORTH MUNICIPAL HOSPITAL	1
PALO ALTO COUNTY HEALTH SYSTEM	16
CENTRAL COMMUNITY HOSPITAL	2
MERCY MEDICAL CENTER-NORTH IOWA	1
MERCY MEDICAL CENTER-CLINTON	6
MERCY MEDICAL CENTER-SIOUX CITY	13
WAYNE COUNTY HOSPITAL	7 8
MERCY MEDICAL CENTER-MERCY CAPITOL	
MERCY MEDICAL CENTER-DES MOINES	11
MERCY MEDICAL CENTER-CENTERVILLE	8
MRTC Affiliate	
STEWART MEMORIAL COMMUNITY HOSPITAL	17
FLOYD COUNTY MEMORIAL HOSPITAL(Dup Mayo)	1
MARY GREELEY MEDICAL CENTER	14
MARSHALLTOWN MEDICAL & SURGICAL CENTER	9
	1

Hosp Sit	e CWDM	Other Ha	ardware							
<u>Std</u>	<u> Std +</u>	Base16	<u>Trans</u>	Mux	Mux8	<u>LX</u>	LX+	<u>XD</u>	<u>cw</u>	<u>cw+</u>
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1				1		1			1	2

Hospital Name	<u>MA</u>
Iowa Health System	
GUTTENBERG MUNICIPAL HOSPITAL	2
COMMUNITY MEMORIAL HOSPITAL	2
BUENA VISTA REGIONAL MEDICAL CENTER	17
CLARKE COUNTY HOSPITAL	11
HUMBOLDT COUNTY MEMORIAL HOSPITAL	17
JACKSON COUNTY REGIONAL HEALTH CENTER	6
GRUNDY COUNTY MEMORIAL HOSPITAL	9
DALLAS COUNTY HOSPITAL	10
POCAHONTAS COMMUNITY HOSPITAL	17
GREENE COUNTY MEDICAL CENTER	17
LORING HOSPITAL	17
OTTUMWA REGIONAL HEALTH CENTER(Dup U of I)	8
GREATER REGIONAL MEDICAL CENTER	11
	1

Hosp Sit	e CWDM	Other H		_						
<u>Std</u>	<u> Std +</u>	Base16	<u>Trans</u>	<u>Mux</u>	Mux8	<u>LX</u>	<u>LX+</u>	$\underline{XD}$	<u>cw</u>	<u>CW+</u>
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Hospital Name	MA
University of Iowa Hospitals	
MARENGO MEMORIAL HOSPITAL	5
WASHINGTON COUNTY HOSPITAL & CLINICS	5
VIRGINIA GAY HOSPITAL	4
VAN BUREN COUNTY HOSPITAL	8
WAVERLY HEALTH CENTER	9
UNIVERSITY OF IOWA HOSPITALS & CLINICS	5
OTTUMWA REGIONAL HEALTH CENTER (Dup IHS)	8
Hospital Name	
-	┨
Genesis Health System	┨╻╏
GENESIS MEDICAL CENTER - East Campus	6   6
GENESIS MEDICAL CENTER-DEWITT	┨╹
Hospital Name	$\dashv$
Health Partners of SW Iowa	7
MONTGOMERY COUNTY MEMORIAL HOSPITAL	11

Hosp Sit	e CWDM	Other H								
<u>Std</u>	<u> Std +</u>	Base16	<u>Trans</u>	Mux	Mux8	<u>LX</u>	<u>LX+</u>	$\underline{XD}$	<u>cw</u>	<u>CW+</u>
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Hospital Name	<u>MA</u>
Non Affiliated Hospitals	
BURGESS HEALTH CENTER	13
GRAPE COMMUNITY HOSPITAL	12
CRAWFORD COUNTY MEMORIAL HOSPITAL	13
PELLA REGIONAL HEALTH CENTER	10
KNOXVILLE HOSPITAL & CLINICS	10
MAHASKA HEALTH PARTNERSHIP	8
BUCHANAN COUNTY HEALTH CENTER	9
REGIONAL MEDICAL CENTER	3 7
HENRY COUNTY HEALTH CENTER	7
VETERANS MEMORIAL HOSPITAL	2 8
LUCAS COUNTY HEALTH CENTER	8
BOONE COUNTY HOSPITAL	14
CHEROKEE REGIONAL MEDICAL CENTER	13
JEFFERSON COUNTY HOSPITAL	8
HORN MEMORIAL HOSPITAL	13
Hospital Name	
FORT MADISON COMMUNITY HOSPITAL	7
UNITY HEALTHCARE	6
LAKES REGIONAL HEALTHCARE	16
GRINNELL REGIONAL MEDICAL CENTER	9
KEOKUK AREA HOSPITAL	7
GREAT RIVER MEDICAL CENTER	7
SKIFF MEDICAL CENTER	10
SPENCER MUNICIPAL HOSPITAL	16
MERCY MEDICAL CENTER	4
	1

Hosp Sit	e CWDM	Other H	ardware								
<u>Std</u>	<u> Std +</u>	<u>Base16</u>	<u>Trans</u>	<u>Mux</u>	Mux8	<u>LX</u>	<u>LX+</u>	$\underline{\mathrm{XD}}$	<u>cw</u>	<u>CW+</u>	
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A 1	1			1		2 1 1			1	2 1	

Hospital Name	<u>MA</u>
Alegent Health - Omaha	
ALEGENT HEALTH MERCY HOSPITAL - CORNING	11
ALEGENT HEALTH-MERCY HOSPITAL - COUNCIL BLUFFS	12
ALEGENT HEALTH COMMUNITY MEMORIAL HOSPITAL	12
Methodist Health Center	
JENNIE EDMUNDSON HOSPITAL	12
	1
Nebraska Health System	
SHENANDOAH MEDICAL CENTER	12

Hosp Site CWDM					_					_	
	<u>Std</u>	<u> Std +</u>	Base16	<u>Trans</u>	<u>Mux</u>	Mux8	<u>LX</u>	<u>LX+</u>	$\underline{\mathrm{XD}}$	<u>CW</u>	<u>CW+</u>
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	А						1	1			2

Hospital Name							
Avera Health - Sioux Falls							
HEGG MEMORIAL	15						
SIOUX CENTER COMMUNITY HOSPITAL & HEALTH CENTER							
AVERA HOLY FAMILY HEALTH							
OSCEOLA COMMUNITY HOSPITAL							
FLOYD VALLEY HOSPITAL							
Sanford Health System							
ORANGE CITY AREA HEALTH SYSTEM	15						
MERRILL PIONEER COMMUNITY HOSPITAL	15						
NORTHWEST IOWA HEALTH CENTER	15						

Hosp Site CWDM									
<u>Std                                    </u>	Base16	<u>Trans</u>	Mux	Mux8	<u>LX</u>	<u>LX+</u>	<u>XD</u>	<u>cw</u>	<u>CW+</u>
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Hospital Name						
Mayo Health System						
WINNESHIEK MEDICAL CENTER	2					
Other Out of State						
ST ANTHONY REGIONAL HOSPITAL	14					

Hosp Sit		Other Hardware											
<u>Std</u>	<u> Std + </u>	<u>Base16</u>	<u>Trans</u>	Mux	Mux8	<u>LX</u>	<u>LX+</u>	<u>XD</u>	<u>cw</u>	<u>CW+</u>			
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			sp Site	e CWDM	Other H	ardware							
Supporting Sites	MA		3 <u>td</u>	Std +	Base16	Trans	Mux	Mux8	LX	LX+	XD	cw	<u>cw+</u>
REGEN 204	1				1		1						
Mason City - Part 1	1 1				1	4	1						
Oelwein - Part 2	2				1	2	1	1					
Elkader - Part 2	2				1	1	1						
Calmar - Part 1	2				1	4		1					
Peosta - Part 1	3				1	1							
REGEN 603	4				1	1	1						
Waterloo - Part 1	4				1	3							
Cedar Rapids - Part 1	5				1	2							
University of Iowa - Part 2	6				1	2		1					
SP 43	6				1	3		1					
St. Ambrose - Part 3	7				1	1	1						
Bettendorf - Part 1	7				1	3	1						
Burlington - Part 1	8				1	2							
Fairfield - Part 2	9				1	1	1						
Chariton - Part 2	9				1	1	1						
Albia - Part 2	9				1	1	1	1					
Ottumwa - Part 1	9				1	5	1	1					
REGEN 1106	10				1	1	1						
Winterset - Part 2	10				1	1	1						
JFHQ	10				1	3	2						
Mount Ayr - Part 2	11				1	1	1						
REGEN 1120	11				1	1	1	1					
Audubon - Part 2	11				1	1	1						
Corning - Part 2	11				1	1	1						
Creston - Part 1	11				1	5	2	1					
Sidney - Part 2	12				1	2		1					
Council Bluffs ING	12				1	1	1						
Council Bluffs - Part 1	12				1	4	1	1					
lda Grove - Part 2	13				1	1	1						
REGEN 1204	13				1	2		1					
Sioux City - Part 1	13				1	3		1					
Ames - Part 2	14				1	1	1						
SP125	14				1	2	1						
Sioux Center - Part 2	15				1	1		1					
Sheldon - Part 1	15				1	3		1					
Estherville - Part 1	16				1	2							
Rockwell City - Part 2	17				1	1		1					
REGEN 1131	17				1	1							
Fort Dodge - Part 1	17				1	4		1					
SP23													
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		40.0:	4.0:		, ,					4.0:					
		10 Gig	1 Gig	Site	H	Base System		10 Gig		1 Gig				ı	
MPLS Backbone	<u>MA</u>	<u>Ports</u>	<u>Ports</u>	<u>Type</u>		<u>Chassis</u>	DC P/S	2 Port	<u>XFP</u>	<u> 10 Port</u>	<u>LX</u>	<u>LX+</u>	<u>XD</u>	<u>cw</u>	<u>CW+</u>
REGEN 204	1	_	_				_	_	_		_				
Mason City - Part 1	1	3	7			1	2	2	3	1	7				
Oelwein - Part 2	2														
Elkader - Part 2	2	_	_			_	_		_	_					
Calmar - Part 1	2	2	7			1	2	1	2	1	7				
Peosta - Part 1	3	3	3			1	2	2	3	1	3				
REGEN 603	4					_	_								
Waterloo - Part 1	4	2	5			1	2	1	2	1	5				
Cedar Rapids - Part 1	5	2	2			1	2	1	2	1	2				
University of Iowa - Part 2	6														
SP 43	6	4	4			1	2	2	4	1	4				
St. Ambrose - Part 3	7														
Bettendorf - Part 1	7	2	5			1	2	1	2	1	5				
Burlington - Part 1	8	2	4			1	2	1	2	1	4				
Fairfield - Part 2	9														
Chariton - Part 2	9				H										
Albia - Part 2	9				H										
Ottumwa - Part 1	9	4	9			1	2	2	4	1	9				
REGEN 1106	10														
Winterset - Part 2	10														
JFHQ	10	4	5			1	2	2	4	1	5				
Mount Aγr - Part 2	11														
REGEN 1120	11														
Audubon - Part 2	11														
Corning - Part 2	11														
Creston - Part 1	11	2	9			1	2	1	2	1	9				
Sidneγ - Part 2	12														
Council Bluffs ING	12														
Council Bluffs - Part 1	12	3	7			1	2	2	3	1	7				
Ida Grove - Part 2	13														
REGEN 1204	13														
Sioux City - Part 1	13	3	6			1	2	2	3	1	6				
Ames - Part 2	14						_			·					
SP125	14	5	5			1	2	3	5	1	5				
Sioux Center - Part 2	15						_								
Sheldon - Part 1	15	2	10			1	2	1	2	1	10				
Estherville - Part 1	16	2	5			1	2	i	2	1	5				
Rockwell City - Part 2	17	_	,				_		_		,				
REGEN 1131	17														
Fort Dodge - Part 1	17	3	6			1	2	2	3	1	6				
SP23	"	4	0			1	2	2	4	Ö	0				
Des Moines - Lucas	10	2	2			4	2	1	2	1	2				
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			101			19	20	JU	54	10	101	U	U	U	U

### What is the HAN?

The Iowa Health Alert Network (HAN) is a secure, web-based communication system allowing users to issue alerts, share documents, post announcements and news items, and collaborate. Iowa's HAN was rolled out to users the summer of 2004. Today, there are over 1700 users on the system.

The HAN can be accessed through the Internet from any computer. Users of the system must be licensed and are issued secure usernames and passwords. The system serves as a public health directory, providing a registry of users and contact information. The system provides users the ability to send and receive alerts; enabling users to choose how they wish to be notified of an emergency event (email, cell phone, traditional phone, pager, Blackberries, and/or fax). The system also provides document management capabilities, allowing users to post documents, subscribe to receive notifications when specified documents are modified and collaborate with other users on the system.

Four T1 lines allowing for 96 telephone lines provide the backbone of the primary and secondary systems. The Iowa Department of Public Health (IDPH) administers the system with IT specialists and duty officers available 24/7.

Other HAN Activities include:

- Upgrading computer infrastructure so all Iowa all local public health agencies and hospitals have highspeed Internet connectivity.
- Providing a state-wide 800 MHz radios system for all Iowa hospitals and local public health agencies, state laboratory, poison center, and all EMS helicopters.
- High Frequency radio system for redundant communications with federal partners and states.
- Public Health Response Team Communications and Support Trailer
- VHF and 800 MHz radios radio cache

IDPH facilitates a Communications/IT Subcommittee as part of the state Preparedness Advisory Committee which is composed of representatives from local public health agencies, hospitals, laboratories, emergency medical services, and state agencies to offer recommendations and support as Iowa's HAN system evolves. This committee continues to meet as we plan the future of this critical resource for emergency response.

### For more information, contact:

Health Alert Network Iowa Department of Public Health (515) 281-0914 HANOfficer@IowaHealthAlert.org



Please detach this card and carry it in a safe place:



### **Iowa Health Alert Network**

https://www.IowaHealthAlert.org

### **HAN Help Desk:**

HANOfficer@IowaHealthAlert.org

(515) 281-0914

### **Iowa Department of Public Health**

Center for Disaster Operations & Response Lucas State Office Building 321 E 12<sup>th</sup> Street Des Moines, Iowa 50319-0075

### **Request to Add Users**

To request licenses, submit the following information to HANOfficer@IowaHealthAlert.org or send to the address shown on the cover.

A Memorandum of Understanding will be prepared and returned to you for signature and payment.

Agency / Entity	
Requestor's Name	
Email Address	
Phone	
Street Address	
City	
State	
Zip	
Fax Number	
Number of Collaborator Licenses requested	
Number of Alert Licenses requested	

#### **HAN License Costs**

### **Collaborator License**

Initial cost per user license Maintenance cost annually after first year

Users have access to most of the functionality provided on the HAN portal. This includes the ability to access information, publish and edit documents, subscribe to content, fax distribute documents, look up others in the Public Health Directory and participate in discussions based upon the permissions that have been assigned to that user's roles. Furthermore, they will be able to initiate alerts, if the Administrator grants permissions, and they are able to maintain their own profiles through the portal.

#### **Alert License**

Initial cost per user license Maintenance cost annually after first year

Users have access to some of the functionality provided on the HAN portal. This includes access to the home page News and Announcements and access to the Public Health Directory. They are able to maintain their own profiles through the portal.

User Name \_\_\_\_\_\_ Alert Security Code \_\_\_\_

Password Hint (circle one)

1.Mother's maiden name 2.First pet's name 3.Childhood street address

#### **Important Phone Numbers**

#### **Current Iowa HAN Users**

**Community Health Centers County Emergency Management Agencies County Extension Offices Disaster Medical Assistance Teams Hospital Emergency Departments Environmental Health Agencies Emergency Medical Services Fusion Centers Epidemiologists** HazMat Teams Safeguard Iowa Partnership Members **Hospital Administrators Infection Control Practitioners Hospital and Sentinel Laboratories Local Public Health Agencies Public Health Nursing Agencies** 

### **State Agencies:**

All State Department Directors
Homeland Security and Emergency Management
Department of Agriculture and Land Stewardship
Department of Human Services
Department of Inspections and Appeals
Department of Natural Resources
Department of Public Health
Department of Public Safety
Department of Transportation
Governor's Office
Iowa National Guard
71st Civil Support Team
Iowa Poison Center
State Medical Examiner
University Hygienic Laboratory

REPLY TO:

☐ 135 HART SENATE OFFICE BUILDING
WASHINGTON, DC 20510–1501
(202) 224–3744
TTY: (202) 224–4479
e-mail: chuck\_grassley@grassley.senate.gov

721 FEDERAL BUILDING 210 WALNUT STREET DES MOINES, IA 50309-2140 (515) 288-1145

☐ 206 FEDERAL BUILDING 101 1st STREET SE CEDAR RAPIOS, IA 52401–1227 (319) 363–6832

### United States Senate

CHARLES E. GRASSLEY

WASHINGTON, DC 20510-1501

May 4, 2007

The Honorable Kevin J. Martin Chairman Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Dear Chairman Martin:

I am contacting you on behalf of Iowans seeking a Federal Communications Commission (FCC) grant to better serve rural Iowans. I am referring to the Iowa Rural Health Telecommunications Program (IRHTP) proposal that the Iowa Hospital Association (IHA) is developing in partnership with Iowa hospitals and submitting to the FCC's Rural Health Care Pilot Program (Order WC docket 02-60). Ninety-seven of Iowa's 117 hospitals may participate, the majority of which are rural and critical access hospitals.

The IRHTP proposes to use funds under this program to provide high-bandwidth fiber optic connections between rural and urban Iowa hospitals via the Iowa Communications Network backbone. Hospitals can use the increased bandwidth for whatever applications they choose—including clinical imaging, electronic health records, remote monitoring of intensive care units, telemedicine, educational programming and electronic reporting.

The IHA believes their IRHTP proposal will benefit Iowans in the following many ways. Clinical images would be read more quickly, leading to quicker diagnosis and treatment, especially for rural Iowans. Iowa's rural hospitals would be relieved of expensive data storage. Improved quality and patient safety would be realized by using electronic health records. Continuous monitoring can help save lives and shorten durations of stay in ICUs. Rural Iowans would experience increased access to medical specialists, and driving time for doctors, nurses and administrators would be reduced, and in some instances eliminated, to attend continuing education programs.

For too long, it seems as though some patients in rural areas are held hostage because of their geographic location. The FCC's approval of the IRHTP proposal can help rural lowans receive quality health care. I urge your full and fair consideration of the Iowa Rural Health Telecommunications Program proposal.

Sincerely,

Charles E. Grassley
United States Senator

CEG/dey

RANKING MEMBER, FINANCE Committee Assignments:

BUDGET JUDICIARY AGRICULTURE

PRINTED ON RECYCLED PAPER

REPLY TO

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131 West 3nd Street
Suite 180
Davenport, IA 52801–1419
(563) 322–4331

307 FEDERAL BUILDING 8 SOUTH 6TH STREET COUNCIL BLUFFS, IA 51501–4204 (712) 322–7103

CO-CHAIRMAN, INTERNATIONAL NARCOTICS CONTROL CAUCUS

#### LEONARD L. BOSWELL 3rd District, Iowa

OFFICES: 1427 LONGWORTH HOUSE OFFICE BUILDING WASHINSTON, DC 20515 (202) 225-3806

> 300 EAST LOCUST STREET SUITE 320 DES MOINES, IA 50309 (515) 282-1909

Tota Free Iowa Number 1-888-432-1984

### Congress of the United States House of Representatives

Washington, DC 20515-1503 May 2, 2007

http://beswell.house.gov.

Chairman Kevin Martin Federal Communications Commission 445 12<sup>th</sup> St, SW Washington, DC 20554

Dear Chairman Martin:

I are writing to show our support for the Iowa Rural Health Telecommunications Program proposal that the Iowa Hospital Association is developing in partnership with Iowa hospitals and submitting to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60. I understand that 97 Iowa hospitals may be participating, the majority of which are critical access hospitals.

The Iowa Rural Health Telecommunications Program proposes to use funds under this program to provide high bandwidth fiber optic connections between rural and urban Iowa hospitals via the Iowa Communications Network (ICN) backbone. Hospitals can use the increased bandwidth for multiple uses including: clinical imaging, electronic health records, remote monitoring of intensive care units, tele-medicine, educational programming and electronic reporting.

The Iowa Rural Health Telecommunication Program would benefit Iowans by having access to clinical images more quickly, relieving rural hospitals high cost of data storage, improving quality and patient safety through the use of electronic health records, increased access to medical specialist, and eliminating driving time for doctors and nurses to attend continuing education programs.

The Iowa Hospital Association will help ensure that quality health care is provided to rural Iowans. This proposal is supported by Iowa hospitals, including both those that are already participants in existing tele-health networks, as well as those that are not affiliated with existing tele-health networks. These hospitals have come together to build upon the capabilities of the ICN. I would once again like to highlight the benefits and merit of the Iowa Hospital Association proposal and the benefits it offers to rural Iowa. I request that the FCC give this proposal adequate consideration.

Thank you for your attention to this matter.

Sincerely,

Leonard L. Boswell Member of Congress COMMITTEES:
AGRICULTURE
CMAHMAN, SUBCOMMITTEE ON LIVESTOCK,
DAIRY AND POULTBY

SUBCOMMITTEE ON CONSERVATION, CREDIT, ENERGY AND RESEARCH

TRANSPORTATION AND INFRASTRUCTURE SUBCOMMITTEE ON AVAILOR

SUBCOMMITTEE ON RAILHOADS, PIPELINES AND HAZAIDOUS MATERIALS

PERMANENT SELECT COMMITTEE
ON INTELLIGENCE
SUBCOMMITTEE DE TEIRIORISM, HUMAN
INTELLIGENCE, ANALYTIA AND
COUNTERINTELLIGENCE



### CONGRESS OF THE UNITED STATES

May 2, 2007

TOM LATHAM Congressman 4th District, Iowa Mr. Kirk Norris President Iowa Hospital Association 100 East Grand, Suite 100 Des Moines, Iowa 50309

### Dear Kirk:

I am writing to show my support for the Iowa Rural Health Telecommunications Program proposal that the Iowa Hospital Association is developing in partnership with Iowa hospitals and submitting to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60. I understand that 97 Iowa hospitals may be participating, the majority of which are critical access hospitals.

The Iowa Rural Health Telecommunications Program proposes to use funds under this program to provide high bandwidth fiber optic connections between rural and urban Iowa hospitals via the Iowa Communications Network (ICN) backbone. Hospitals can use the increased bandwidth for whatever applications they choose. These applications can include clinical imaging, electronic health records, remote monitoring of intensive care units, telemedicine, educational programming and electronic reporting.

Washington Office: 2447 Rayburn Building Washington, DC 20515

202-225-5476 202-225-3301 Fax 1-866-428-5642 Toll Free

#### Ames Office:

1421 South Bell Avenue, Suite 108A Ames, Iowa 50010 515-232-2885 515-232-2844 Fax

Clear Lake/Mason City Office:

812 Hwy 18 East P.O. Box 532 Clear Lake, Iowa 50428 641-357-5225 641-357-5226 Fax

Fort Dodge Office:

1426 Central Avenue, Suite A Fort Dodge, Iowa 50501 515-573-2738 515-576-7141 Fax Most importantly, I understand this proposal will benefit Iowans because:

- Clinical images are read more quickly, leading to quicker diagnosis and treatment, especially for rural Iowans;
- Rural hospitals are relieved of the high cost of data storage;
- Improved quality and patient safety through the use of electronic health records;
- Continuous monitoring saves lives and shortens length of stay in the ICU;
- Increased access for rural Iowans to medical specialists; and
- Eliminates driving time for doctors, nurses and administrators to attend continuing education programs.

The proposal would help ensure that quality health care is provided to rural Iowans. There should not be a distinction of health care services based upon geographic location of the patient. Everyone should have access to the best care possible. This proposal is strongly supported by Iowa hospitals, including both those that are already treating participants in existing telehealth networks, as well

Email: tom.latham@mail.house.gov Internet: www.house.gov/latham as those that are not affiliated with existing telehealth networks. These hospitals have come together to build upon the capabilities of the ICN. For these reasons, I support the Iowa Rural Health Telecommunications Program proposal that is being submitting to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

Sincerely,

Tom Latham

Member of Congress

### Congress of the United States

House of Representatives Washington, DC 20515-1505 JUDICIARY

AGRICULTURE

SMALL BUSINESS

May 3, 2007

Mr. Kirk Norris, President Iowa Hospital Association 100 East Grand, Suite 100 Des Moines, Iowa 50309

Dear Mr. Norris:

I am writing today about the Iowa Rural Health Telecommunications Program proposal that the Iowa Hospital Association is developing in partnership with Iowa hospitals and submitting to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60. I understand that 97 Iowa hospitals may be participating, the majority of which are critical access hospitals.

The Iowa Rural Health Telecommunications Program proposes to use funds under this program to provide high bandwidth fiber optic connections between rural and urban Iowa hospitals via the Iowa Communications Network (ICN) backbone. Hospitals can use the increased bandwidth for whatever applications they choose. These applications can include clinical imaging, electronic health records, remote monitoring of intensive care units, telemedicine, educational programming and electronic reporting. I understand this proposal will benefit Iowans because:

- Clinical images are read more quickly, leading to quicker diagnosis and treatment, especially for rural Iowans;
- Rural hospitals are relieved of the high cost of data storage;
- Improved quality and patient safety through the use of electronic health records;
- Continuous monitoring saves lives and shortens length of stay in the ICU;
- Increased access for rural Iowans to medical specialists; and
- Eliminates driving time for doctors, nurses and administrators to attend continuing education programs.

I support efforts like these to ensure that quality health care is provided to rural Iowans. There should not be a distinction of health care services based upon geographic location of the patient. Everyone should have access to the best care possible.

Sincerely,

Steve King

Member of Congress

SK\pas

steve King

**BRUCE L. BRALEY** 

1ST DISTRICT, IOWA

WASHINGTON, DC OFFICE

1408 LONGWORTH BUILDING WASHINGTON, DC 20515 (202) 225-2911 FAX (202) 225-6666

HTTP://WWW.HOUSE.GOV/BRALEY

TRANSPORTATION AND INFRASTRUCTURE COMMITTEE

OVERSIGHT AND GOVERNMENT REFORM COMMITTEE

SMALL BUSINESS COMMITTEE

CHAIRMAN, CONTRACTING AND TECHNOLOGY SUBCOMMITTEE

Chairman Kevin Martin Federal Communications Commission 445 12<sup>th</sup> St, SW Washington, DC 20554

Dear Chairman Martin:

### Congress of the United States House of Representatives

Washington, DC 20515

May 3, 2007

WATERLOO DISTRICT OFFICE

501 Sycamore St., Suite 623 Waterloo, IA 50703 Phone: (319) 287-3233 Fax: (319) 287-5104

### DAVENPORT DISTRICT OFFICE

209 W. 4TH ST., SUITE 104 DAVENPORT, IA 52801 PHONE: (563) 323-5988 FAX: (563) 323-5231

#### DUBUQUE DISTRICT OFFICE

350 W. 67H ST., SUITE 222 Dubuque, IA 52001 Phone: (563) 557-7789 Fax: (563) 557-1324

I am writing to urge support for the Iowa Rural Health Telecommunications Program proposal that the Iowa Hospital Association is developing in partnership with Iowa hospitals and submitting to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60. I understand that 97 Iowa hospitals may be participating, the majority of which are critical access hospitals.

The Iowa Rural Health Telecommunications Program proposes to use funds under this program to provide high bandwidth fiber optic connections between rural and urban Iowa hospitals via the Iowa Communications Network (ICN) backbone. Hospitals can use the increased bandwidth for whatever applications they choose. These applications can include clinical imaging, electronic health records, remote monitoring of intensive care units, telemedicine, educational programming and electronic reporting.

Most importantly, I understand this proposal will benefit Iowans because:

- Clinical images are read more quickly, leading to quicker diagnosis and treatment, especially for rural Iowans;
- Rural hospitals are relieved of the high cost of data storage;
- Improved quality and patient safety through the use of electronic health records;
- Continuous monitoring saves lives and shortens length of stay in the ICU;
- Increased access for rural Iowans to medical specialists; and
- Eliminates driving time for doctors, nurses and administrators to attend continuing education programs.

I support this coordinated application. It will help ensure that quality health care is provided to rural Iowans. There should not be a distinction of health care services based upon geographic location of the patient. Everyone should have access to the best care possible. This proposal is strongly supported by Iowa hospitals, including both those that are already participants in existing telehealth networks, as well as those that are not affiliated with existing telehealth

networks. These hospitals have come together to build upon the capabilities of the ICN. For these reasons, I support the Iowa Rural Health Telecommunications Program proposal that is being submitting to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

Sincerely,

Bruce L. Braley Member of Congress

#### DAVID LOEBSACK

2ND DISTRICT, IOWA

COMMITTEES:
ARMED SERVICES
SUBCOMMITTEES:
STRATEGIC FORCES
READINESS

### EDUCATION AND LABOR

SUBCOMMITTEES: HEALTH, EMPLOYMENT, LABOR, AND PENSIONS

EARLY CHILDHOOD, ELEMENTARY AND SECONDARY EDUCATION

### Congress of the United States House of Representatives

Washington, **DC** 20515—1502

WASHINGTON OFFICE: 1513 LONGWORTH HOUSE OFFICE BUILDING WASHINGTON, DC 20515 (202) 225–6576

DISTRICT OFFICES:

125 South Dubuque Street Iowa City, IA 52240 (319) 351-0789

150 1ST AVENUE NE SUITE 375 CEDAR RAPIDS, IA 52401 (319) 364-2288 1 (866) 914-IOWA

May 3, 2007

Mr. Kirk Norris President Iowa Hospital Association 100 East Grand, Suite 100 Des Moines, Iowa 50309

Dear Mr. Norris:

I am writing to express my support for the Iowa Rural Health Telecommunications Program proposal that the Iowa Hospital Association is developing in partnership with Iowa hospitals and submitting to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

The Iowa Rural Health Telecommunications Program proposes to use funds under this program to provide high bandwidth fiber optic connections between rural and urban Iowa hospitals via the Iowa Communications Network (ICN) backbone. Hospitals can use the increased bandwidth for whatever applications they choose. These applications can include clinical imaging, electronic health records, remote monitoring of intensive care units, telemedicine, educational programming and electronic reporting.

Most importantly, we understand this proposal will benefit Iowans because:

- Clinical images are read more quickly, leading to quicker diagnosis and treatment, especially for rural Iowans;
- Rural hospitals are relieved of the high cost of data storage;
- There will be improved quality and patient safety through the use of electronic health records;
- Continuous monitoring saves lives and shortens length of stay in the ICU;
- There will be increased access for rural Iowans to medical specialists; and
- It will eliminate driving time for doctors, nurses and administrators to attend continuing education programs.

This important program will help ensure that quality health care is provided to rural Iowans. There should not be a distinction of health care services based upon the geographic location of the patient. Everyone should have access to the best care possible. This proposal is strongly supported by Iowa hospitals, including both those that are already participants in existing

telehealth networks, as well as those that are not affiliated with existing telehealth networks. These hospitals have come together to build upon the capabilities of the ICN. For these reasons, I support the Iowa Rural Health Telecommunications Program proposal that is being submitting to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

Sincerely, Save Lobsock

Congressman Dave Loebsack



### OFFICE OF THE GOVERNOR

PATTY JUDGE LT. GOVERNOR

GOVERNOR

CHESTER J. CULVER

April 23, 2007

Art Spies Iowa Hospital Association 100 E. Grand Avenue, Suite 100 Des Moines, Iowa 50309-1835

Dear Art:

On behalf of the State of Iowa, I am pleased to support and endorse the funding request of the Iowa Rural Health Telecommunications Program to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

The proposed project will connect 74 rural and 6 urban lowa hospitals to a dedicated band of the lowa Communications Network (ICN) which is an existing broadband fiber optic network. Once connected, hospital telemedicine and telehealth applications in areas of clinical imaging, remote monitoring of intensive care unit patients, transfer of patient files, and physician / patient consultations will quickly develop as well as distance learning / education initiatives. Iowans will benefit because:

- Clinical images will be read more quickly, leading to quicker diagnosis and treatment, especially for rural lowa,
- Improved quality and patient safety will be realized through the use of electronic health records and rapid transfer of patient information,
- Access to continuous remote monitoring of ICU patients by specialists will be gained which will save lives and shorten length of stay,
- Increased access for rural lowans to medical specialists will occur.
- Distance learning will eliminate driving time for doctors, nurses, administrators and trustees to attend continuing education programs, and
- Rural hospitals will have access to tertiary medical information and research gained through Internet 2 connectivity.

The investment to create a dedicated broadband fiber optic network will clearly improve access to and quality of health care services to rural lowans. For these reasons I am pleased to support and endorse the Iowa Rural Health Telecommunications Program proposal submitted by the Iowa Hospital Association on behalf of 80 Iowa hospitals.

Sincerely,

Chester J. Culver

Governor



May 3, 2007

Mr. Art Spies lowa Hospital Association 100 E. Grand Avenue, Suite 100 Des Moines, Iowa 50309-1835

Dear Art:

As former governor of the state of lowa, and president of Des Moines University, a nationally-recognized medical school with alumni in 95 of lowa's 99 counties, I am pleased to support the funding request of the Iowa Rural Health Telecommunications Program (IRHTP) to the Federal Communications Commission Rural Health Care Pilot Program, Order WC docket 02-60.

Funding for this grant to deliver broadband access to rural healthcare facilities is vital for the citizens of lowa. Funding would ensure broadband access for 97 healthcare facilities in lowa, with 71 of the facilities located in counties with population densities lower than the state average of 52.9 people per square mile. Broadband access would provide the tools these rural facilities need to deliver advanced, quality medical services to lowans. These applications include clinical imaging, remote monitoring of intensive care patients, transfer of patient files and physician/patient consultations. This project would dramatically change lowans' quality of life by providing an exponential growth in the level of rural health services.

As governor, I spearheaded the construction of the lowa Communications Network. The proposal calls for the ICN to be the fiber-optic telecommunications carrier to haul the broadband and manage the broadband network. ICN has been in place for over a decade and has been used to deliver telemedicine applications where last mile connections exist. In 1994, I appointed a 22-member telemedicine advisory council to identify the critical issues that the state would face. I believed then, and still believe, that telemedicine applications are paramount to the future of our rural state.

An investment by the FCC for a dedicated telehealth broadband network will ensure lowa's medically-underserved communities have the increased access to applications and services their patients need and desire.

For all of the reasons stated, I am pleased to support and endorse the Iowa Rural Health Telecommunications Program submitted by the Iowa Hospital Association on behalf of 97 Iowa hospitals.

Sincerely,

Governor Terry E. Branstad

Treny E. Branda

President & CEO

Office of the President

3200 Grand Avenue Des Moines, Iowa 50312-4198

> 515.271.1500 FAX 515.271.1532 www.dmu.edu



### STATE OF IOWA

CHESTER J. CULVER GOVERNOR

> PATTY JUDGE LT. GOVERNOR

DEPARTMENT OF PUBLIC DEFENSE IOWA HOMELAND SECURITY AND EMERGENCY MANAGEMENT DIVISION DAVID L. MILLER, ADMINISTRATOR

April 27, 2007

Mr. Art Spies Iowa Hospital Association 100 East Grand Avenue – Suite 100 Des Moines, Iowa 50309-1835

Dear Art:

I am pleased to support and endorse the funding request for the Iowa Rural Health Telecommunications Program to the Federal Communications Commission Rural Health Care Pilot Program, Order WC docket 02-60.

As you know, the Iowa Homeland Security and Emergency Management Division has historically had a long standing relationship with the Iowa Hospital Association and representatives from the Association are involved in many Division activities. The Association has been an intricate part of the planning by State and local agencies for a number of disasters to include the recent efforts relating to pandemic influenza.

A pandemic outbreak will know no boundaries. Rural areas are just as vulnerable and as important as urban areas. Our disaster planning assumes a reliable, high bandwidth connection from rural hospitals to regional hospitals is needed to provide those diagnostic services not available locally. The days of "expert" diagnosticians traveling to the rural hospital are past and are no longer time efficient or practical.

The need for very high bandwidth data connections for medical applications has outstripped the backbone capacity of Iowa's rural internet providers. The proposed project will connect 74 rural and 6 urban Iowa hospitals to a dedicated "non-public" connection that is not subject to outages in times of crisis or disaster. This is achieved through the implementation of a restricted, state managed, state operated network; supported by its own back-up power and circuit rerouting technology.

The opportunity to access Internet II provides a whole new spectrum of diagnostic opportunities for Iowa rural hospitals. Clinical images will be read more quickly, leading to quick diagnosis and treatment. Improved quality and patient safety will be realized through the use of electronic health records and rapid transfer of patient information. Access to continuous remote monitoring of ICU patients by specialists will be gained which will save lives and shorten the length of stay for patients. Rural Iowans will have greater access to medical specialists and rural physicians, nurses, and other health care professionals will have greater access to continuing education and research opportunities.

The investment to create a dedicated broadband fiber optic network will clearly improve the quality and access to health care services for rural lowans and will directly impact our ability to effectively respond to and recover from disasters. For these reasons, I am pleased to support and endorse the Iowa Rural Health Telecommunications Program proposal.

Sincerely,

David L. Mille Administrator



May 4, 2007

Federal Communications Commission 445 12<sup>th</sup> Street SW Washington, DC 20554

RE: Rural Health Care Pilot Program, W.C. Docket No. 02-60

To Whom It May Concern:

On behalf of a consortium of 97 Iowa rural and urban hospitals and three hospitals in Nebraska and South Dakota, the Iowa Hospital Association (IHA) submits, supports and endorses the funding request of the Iowa Rural Health Telecommunications Program to the Federal Communications Commission Rural Health Care Pilot Program, WC docket 02-60. The Iowa Hospital Association will administer and direct the Iowa Rural Health Telecommunications Program for all participating hospitals.

The proposed project will connect 87 rural and 10 urban Iowa hospitals, one Nebraska hospital and two South Dakota hospitals to a dedicated band of the Iowa Communications Network (ICN), which is an existing broadband fiber optic network with Internet2 connectivity. These 97 Iowa hospitals join three Veterans Administration hospitals already connected to the ICN and four Iowa mental health institutes. Once connected, hospital telemedicine and telehealth applications in areas of clinical imaging, remote monitoring of intensive care unit patients, transfer of patient files, and physician/patient consultations will quickly develop, as well as distance learning/education initiatives. The benefits for Iowans include quicker diagnosis and treatment, improved quality and patient safety and increased access to medical specialists.

The Iowa Hospital Association will provide the administrative and accounting functions and, if necessary, receive and disburse FCC Pilot Program and hospital funds to contractors. As a non-eligible entity to receive FCC Pilot Program funds, the Iowa Hospital Association will not use any FCC Pilot Program funds to cover any costs incurred by IHA to direct and administer the Iowa Rural Health Telecommunications Program.

The investment to create a dedicated broadband fiber optic network will clearly improve access to and quality of health care services to rural Iowans. For these reasons the Iowa Hospital Association is pleased to submit, support and endorse the Iowa Rural Health Telecommunications Program proposal.

Sincerely.

Kirk Norris President **OFFICERS** 

Brian C. Mehlhaus, MD Boone

President

Douglas W. Martin, MD Sioux City

President-elect

Donald R. Klitgaard, MD Harlan

Vice President

Amr Kamhawy, MD West Des Moines Secretary-Treasurer

David K. Larson, MD Fairfield **Board Chair** 

Susie Kell Des Moines

**Executive Vice President** 

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**AAFP Alternate Delegates** George T. Kappos, MD Robert Lee, MD



### IOWA ACADEMY OF FAMILY PHYSICIANS

We advocate for, educate and support family physicians in their efforts to improve the health and well-being of patients, families and communities.

100 EAST GRAND AVENUE, SUITE #170 • DES MOINES, IA 50309-1800 • WEB ADDRESS www.iaafp.org PHONE 515-283-9370 • TOLL FREE 800-283-9370 • FAX 515-283-9372 • e-mail: <a href="mailto:susiekell@iaafp.org">susiekell@iaafp.org</a>

April 23, 2007

On behalf of the board of The Iowa Academy of Family Physician, we are pleased to support and endorse the funding request of the Iowa Rural Health Telecommunications Program to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

The proposed project is to connect 74 rural and 6 urban Iowa hospitals to a dedicated band of the Iowa Communications Network (ICN) which is an existing broadband fiber optic network. Once connected, hospital telemedicine and telehealth applications in areas of clinical imaging, remote monitoring of intensive care unit patients, transfer of patient files, and physician / patient consultations will quickly develop as well as distance learning / education initiatives. Iowans will benefit because:

- Clinical images will be read more quickly, leading to quicker diagnosis and treatment, especially for rural Iowa,
- Improved quality and patient safety will be realized through the use of electronic health records and rapid transfer of patient information,
- Access to continuous remote monitoring of ICU patients by specialists will be gained which will saves lives and shorten length of stay,
- Increased access for rural Iowans to medical specialists will occur,
- Distance learning will eliminate driving time for doctors, nurses, administrators and trustees to attend continuing education programs, and
- Rural hospitals will have access to tertiary medical information and research gained through Internet 2 connectivity.

The investment to create a dedicated broadband fiber optic network will clearly improve access to and quality of health care services to rural Iowans. For these reasons we are pleased to support and endorse the Iowa Rural Health Telecommunications Program proposal submitted by the Iowa Hospital Association on behalf of 80 Iowa hospitals.

Sincerely,

Brian Mehlhaus, MD

President

# IOMA

950 - 12th Street • Des Moines, Iowa 50309 (515) 283-0002 • Fax (515) 283-0355 leah@ioma.org • www.ioma.org

April 23, 2007

Art Spies Senior Vice President, Membership Services Iowa Hospital Association 100 E. Grand Avenue Des Moines, IA 50309

Dear Mr. Spies:

On behalf of the board of the Iowa Osteopathic Medical Association, we are pleased to support and endorse the funding request of the Iowa Rural Health Telecommunications Program to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

The proposed project is to connect 74 rural and 6 urban Iowa hospitals to a dedicated band of the Iowa Communications Network (ICN) which is an existing broadband fiber optic network. Once connected, hospital telemedicine and telehealth applications in areas of clinical imaging, remote monitoring of intensive care unit patients, transfer of patient files, and physician / patient consultations will quickly develop as well as distance learning / education initiatives. Iowans will benefit because:

- Clinical images will be read more quickly, leading to quicker diagnosis and treatment, especially for rural Iowa,
- Improved quality and patient safety will be realized through the use of electronic health records and rapid transfer of patient information,
- Access to continuous remote monitoring of ICU patients by specialists will be gained which will saves lives and shorten length of stay,
- Increased access for rural Iowans to medical specialists will occur,
- Distance learning will eliminate driving time for doctors, nurses, administrators and trustees to attend continuing education programs, and
- Rural hospitals will have access to tertiary medical information and research gained through Internet 2 connectivity.

The investment to create a dedicated broadband fiber optic network will clearly improve access to and quality of health care services to rural Iowans. For these reasons we are pleased to support and endorse the Iowa Rural Health Telecommunications Program proposal submitted by the Iowa Hospital Association on behalf of 80 Iowa hospitals.

Sincerely,

Dane K. Johnson, D.O.

President



6000 Westown Parkway, Suite 350E West Des Moines, Iowa 50266-7771 (515) 223-2900

April 11, 2007

On behalf of the Iowa Foundation for Medical Care, we are pleased to support and endorse the funding request of the Iowa Rural Health Telecommunications Program to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

The proposed project is to connect 74 rural and 6 urban Iowa hospitals to a dedicated band of the Iowa Communications Network (ICN) which is an existing broadband fiber optic network. Once connected, hospital telemedicine and telehealth applications in areas of clinical imaging, remote monitoring of intensive care unit patients, transfer of patient files, and physician / patient consultations will quickly develop as well as distance learning / education initiatives. Iowans will benefit because:

- Clinical images will be read more quickly, leading to quicker diagnosis and treatment, especially for rural Iowa,
- Improved quality and patient safety will be realized through the use of electronic health records and rapid transfer of patient information,
- Access to continuous remote monitoring of ICU patients by specialists will be gained which will saves lives and shorten length of stay,
- Increased access for rural Iowans to medical specialists will occur,
- Distance learning will eliminate driving time for doctors, nurses, administrators and trustees to attend continuing education programs, and
- Rural hospitals will have access to tertiary medical information and research gained through Internet 2 connectivity.

The investment to create a dedicated broadband fiber optic network will clearly improve access to and quality of health care services to rural Iowans. For these reasons we are pleased to support and endorse the Iowa Rural Health Telecommunications Program proposal submitted by the Iowa Hospital Association on behalf of 80 Iowa hospitals.

Sincerely,

Donald J. Lovasz

Iowa Foundation for Medical Care

Dand love

Chief Executive Officer



April 18, 2007

Mr. Kirk Norris President Iowa Hospital Association 100 East Grand, Suite 100 Des Moines, Iowa 50309

### Dear Kirk:

On behalf of Wellmark Blue Cross Blue Shield, we are pleased to support and endorse the funding request of the Iowa Rural Health Telecommunications Program to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

The proposed project is to connect 74 rural and 6 urban Iowa hospitals to a dedicated band of the Iowa Communications Network (ICN) which is an existing broadband fiber optic network. Once connected, hospital telemedicine and telehealth applications in areas of clinical imaging, remote monitoring of intensive care unit patients, transfer of patient files, and physician/patient consultations will quickly develop as well as distance learning/education initiatives. Iowans will benefit because:

- Clinical images will be read more quickly, leading to quicker diagnosis and treatment, especially for rural Iowa
- Improved quality and patient safety will be realized through the use of electronic health records and rapid transfer of patient information
- Access to continuous remote monitoring of ICU patients by specialists will be gained which will save lives and shorten length of stay
- Increased access for rural Iowans to medical specialists will occur
- Distance learning will eliminate driving time for doctors, nurses, administrators and trustees to attend continuing education programs
- Rural hospitals will have access to tertiary medical information and research gained through Internet 2 connectivity.

The investment to create a dedicated broadband fiber optic network will clearly improve access to and quality of health care services to rural Iowans. For these reasons, we are pleased to support and endorse the Iowa Rural Health Telecommunications Program proposal submitted by the Iowa Hospital Association on behalf of 80 Iowa hospitals.

Sincerely,

Peter W. Roberts

Group Vice President

Provider Relations & Health Management

PWR:bjs



May 1, 2007

Art Spies Senior Vice President, Membership Services Iowa Hospital Association 100 E Grand Ave Suite 100 Des Moines, IA 50309

Dear Art:

On behalf of the Midwest Rural Telemedicine Consortium (MRTC), we are pleased to support and endorse the funding request of the Iowa Rural Health Telecommunications Program to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

The proposed project is to connect 86 rural and 10 urban Iowa hospitals as well as 1 Nebraska hospital and 2 South Dakota Hospitals to a dedicated band of the Iowa Communications Network (ICN) which is an existing broadband fiber optic network. Once connected, hospital telemedicine and telehealth applications in areas of clinical imaging, remote monitoring of intensive care unit patients, transfer of patient files, and physician / patient consultations will quickly develop as well as distance learning / education initiatives.

The Midwest Rural Telemedicine Consortium has partnered with the ICN since 1995 to provide 25 rural and urban hospitals access to clinical, educational and administrative telehealth services. We are very confident in the capability of the ICN to continue to provide us with reliable network service.

The Iowa Rural Health Telecommunications Program will improve and enhance the services we provide to our member hospitals through increased broadband capacity and the addition of available resources from across the state.

### Iowans will benefit because:

- Clinical images will be read more quickly, leading to quicker diagnosis and treatment, especially for rural Iowa
- Improved quality and patient safety will be realized through the use of electronic health records and rapid transfer of patient information
- Access to continuous remote monitoring of ICU patients by specialists will be gained which will saves lives and shorten length of stay
- Increased access for rural Iowans to medical specialists will occur
- Distance learning will eliminate driving time for doctors, nurses, administrators and trustees to attend continuing education programs, and
- Rural hospitals will have access to tertiary medical information and research gained through Internet 2 connectivity.

The investment to create a dedicated broadband fiber optic network will clearly improve access to and quality of health care services to rural Iowans. For these reasons we are pleased to support and endorse the Iowa Rural Health Telecommunications Program proposal submitted by the Iowa Hospital Association on behalf of their consortium of 100 hospitals.

Sincerely,

Fred Eastman, Coordinator, Coordinator, Programming and Administrative Services

Dale Andres, D.O. Medical Director David Hickman Director, Clinical Integration

Mercy Health Network



Sponsored by the Benedictine and Presentation Sisters

3900 West Avera Drive Sioux Falls, South Dakota 57108-5721 (605) 322-4700 Fax: (605) 322-4799 www.avera.org

May 4, 2007

Art Spies, Senior Vice President Iowa Hospital Association 100 East Grand Avenue, Suite 100 Des Moines, IA 50309

RE: Federal Communications Commission, Rural Health Care Pilot Program, W.C. Docket No. 02-60

Dear Mr. Spies:

Avera Health acknowledges the application to the Federal Communications Commission's Rural Health Care Pilot Program (W.C. Docket No. 02-60) by the Iowa Rural Health Telecommunications Program.

Five Iowa hospitals are part of Avera Health and are participating in the Iowa Rural Health Telecommunications Program. Broadband connectivity between the five Iowa hospitals and Avera McKennan Hospital & University Health Center in Sioux Falls, South Dakota aligns with the purpose and goals of each of our proposals and calls for coordinating and linking the efforts in not only South Dakota and Iowa but also in other neighboring states. Ongoing dialogue between the Avera and Iowa projects will assure continued regional coordination.

The secure, robust broadband networks of HUBNet (Avera Health's FCC proposal) and the Iowa Rural Health Telecommunications Program will allow for increased utilization of telehealth, telemedicine and other advance telecommunications and electronic health information technologies across the upper Midwest region.

We look forward to working with the Iowa Rural Health Telecommunications Program in Iowa and other neighboring states in coordinating the development and linking broadband networks across the upper Midwest in the future.

Sincerely,

Jim Veline

Senior Vice President

Art Spies, Senior Vice President Iowa Hospital Association 100 East Grand Avenue, Suite 100 Des Moines, IA 50309

RE: Federal Communications Commission, Rural Health Care Pilot Program, W.C. Docket No. 02-60

Dear Mr. Spies:

Sanford Health acknowledges the application to the Federal Communications Commission's Rural Health Care Pilot Program (W.C. Docket No. 02-60) by the Iowa Rural Health Telecommunications Program.

Three Iowa hospitals are part of Sanford Health and are participating in the Iowa Rural Health Telecommunications Program. Broadband connectivity between the three Iowa hospitals and Sanford Health in Sioux Falls, South Dakota aligns with the purpose and goals of each of our proposals and calls for coordinating and linking the efforts in South Dakota and Iowa. Ongoing dialogue between the Sanford Health and Iowa projects will assure continued regional coordination.

Broadband connectivity will allow for increased utilization of telehealth, telemedicine and other advance telecommunications and electronic health information technologies across the upper mid-west region.

We look forward to working with the Iowa Rural Health Telecommunications Program to coordinate and develop broadband connectivity with Iowa hospitals that are part of our system.

Sincerely.



A partner with Mercy Medical Center - Des Moines

928 6th Ave. Des Moines, IA 50309-1239 Ph 800-637-2994 515-643-3 Fax 515-643-6698 www.mchs.edu

April 18, 2007

Art Spies Senior Vice President, Membership Services Iowa Hospital Association 100 E Grand Ave Suite 100 Des Moines, IA 50309

Dear Mr. Spies:

On behalf of Mercy College of Health Science, we are pleased to support and endorse the funding request of the Iowa Rural Health Telecommunications Program to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

The proposed project is to connect 74 rural and 6 urban Iowa hospitals to a dedicated band of the Iowa Communications Network (ICN) which is an existing broadband fiber optic network. Once connected, Mercy College is ready to assist these hospitals in the education of their existing staff to fill the many high demand healthcare careers offered by our institution through our existing distance education initiatives.

Currently, the College offers certificate, associate and bachelor's education in 15 healthcare careers, including diagnostic medical sonography, emergency medical services – paramedic, medical assisting, nuclear medicine technology, nursing (ASN and BSN), radiologic technology, and surgical technology. Beginning in the 2007-08 academic year, the College will begin to offer education in allied health (BS), physical therapist assistant, and polysomnographic technology. In addition, the College offers entry-level, career options for emergency medical technicians, medical billing and coding assistants, nursing assistants, and pharmacy technicians.

In October 2005, the College opened the federally-funded Patricia Clare Sullivan Center with three additional distance education classrooms that are already connected to the ICN to assist distant learners from throughout the state who may already be employed at one of Iowa's 116 hospitals to obtain additional education in order to apply for a critical opening within their healthcare facility.

The College has a proven track-record of assisting Mercy Medical Center – North Iowa to address a shortage of surgical technologists, by transmitting its Des Moines classroom lectures to an ICN classroom with the Mercy – North Iowa facility in Mason City. Students then received course-required hands-on clinical skill experiences within the Mercy – North Iowa facility under the supervision of the surgery department's education coordinator.

### Iowans will benefit because:

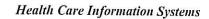
- Rural residents seeking additional education to advance their healthcare careers will be able to remain in their communities and obtain further education in high demand fields their healthcare employer needs to fill;
- Healthcare administrators can target members of their existing workforce for additional education and better manage vacancy levels through educational incentives that reduce or eliminate shortages in key areas;
- Specialized, accredited healthcare educational programming becomes available statewide without the need for additional infrastructure or costly delays in establishing new academic programs;
- Healthcare facilities do not need to make long-term commitments to establish program
  ties, needing only to dedicate classroom space throughout the academic programs of
  greatest need; and
- Most clinical experiences can be arranged within the host/sponsoring healthcare employer's facility to further acclimate the student/employee to their eventual work environment and reduce drive-time for necessary clinical experiences required of student learners.

The investment to create a dedicated broadband fiber optic network will clearly improve access to and quality of health care services to rural Iowans. In addition, the educational opportunities that will become available to these newly connected healthcare facilities will have a dramatic impact on the workforce shortage in Iowa. For these reasons we are pleased to support and endorse the Iowa Rural Health Telecommunications Program proposal submitted by the Iowa Hospital Association on behalf of 80 Iowa hospitals.

Sincerely,

Barbara Quijano Decker, J.D.

President



## UNIVERSITY OF IOWA HOSPITALS & CLINICS

University of Iowa Health Care

200 Hawkins Drive, Rm. BT1000 Iowa City, Iowa 52242 319-356-2432 Tel 319-384-8777 Fax www.uihealthcare.com

April 30, 2007

Mr. Art Spies Senior Vice President, Membership Services Iowa Hospital Association 100 E. Grand Avenue, Suite 100 Des Moines, IA 50309-1835

Mr. Spies,

On behalf of the University of Iowa Hospitals and Clinics (UIHC) we are pleased to support and endorse the funding request of the Iowa Rural Health Telecommunications Program to the Federal Communications Commission Rural Health Care Pilot Program Order WC docket 02-60.

The proposed project is to connect 87 rural and 10 urban Iowa hospitals to a dedicated band of the Iowa Communications Network (ICN) which is an existing state of the art broadband fiber optic network. Once connected, this has the potential for facilitating the development of hospital and telehealth applications, as well as distance learning/education initiatives. Iowans potentially will benefit from this in many ways:

- Clinical images may be read more quickly, leading to quicker diagnosis and treatment, especially for rural Iowans
- Improved quality and patient safety may be realized through the use of electronic health records and rapid transfer of patient information
- Access to continuous remote monitoring of ICU patients by specialists may be gained which may save lives and shorten length of stay
- Increased access for rural Iowans to medical specialists may occur
- Distance learning may eliminate driving time for doctors, nurses, administrators and trustees to attend continuing education programs
- Rural hospitals may have access to tertiary medical information and research gained through Internet 2 connectivity

The investment to create a dedicated broadband fiber optic network has the potential to improve access to and quality of health care services to rural Iowans. For these reasons we are pleased to support and endorse the Iowa Rural Health Telecommunications Program proposal submitted by the Iowa Hospital Association on behalf of 85 Iowa hospitals.

Sincerely.

Lee Carmen

Chief Information Officer

University of Iowa Hospitals and Clinics